PUNJAB DISTRICT GAZETTEERS.

VOLUME XXX A

MIANWALI DISTRICT.

WITH MAPS.

COMPILED AND PUBLISHED UNDER THE AUTHORITY OF THE PUNJAB GOVERNMENT.

Lahore:

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, PUNJAB,

1916.

Price: Rs. 3 or 4s. 6d.

GAZETTEER OF THE MIANWALI DISTRICT, 1915.

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PREFACE.

Of the material, from which this Gazetteer has been compiled, a large proportion consists of passages, freely taken from the District Settlement Report, the several Assessment Reports, the Mianwali Customary Law, and the old Gazetteers of the Bannu and Dera Ismail Khan Districts. In many cases, the sources of these extracts have been stated in the text: in other cases, however, they have been transcribed without designating their origin.

Of the remaining material, the greater part was accumulated by Rai Bahadur Pandit Hari Kishan Kaul, C.I.E., when Settlement Officer in the Mianwali District.

A few accounts have now been added dealing with subjects, without mention of which the Gazetteer would have been incomplete; and the statistics have been brought up to date in the light of the results of the census of 1911.

Volume B of the Gazetteer, which was published in 1912, also contains statistical tables relating to many of the matters dealt with in this volume, and reference has constantly been made to these tables, without as a rule reproducing them.

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CHAPTER I.—DESCRIPTIVE

Section A.—Physical Aspects.

Position, area and name.

MIANWALI is the most south-westerly district of the Rawalpindi Division of the Punjab and lies between 71° and 72° east and 31° and 33° north. It has an area of 5,368 square miles, of which 4,657 square miles are cis-Indus, only the Isa Khel Tahsil, with an area of 711 square miles, lying west of that river. The total length of the district is 180 miles from north to south. Its breadth across the Mianwali, Isa Khel Tahsils is about 50 miles, but it attains a width of some 70 miles in Bhakkar which stretches eastwards to within a few miles of the Jhelum river.

On the formation of the new North-West Frontier Province in 1901 the two tahsils of Mianwali and Isa Khel of the old Bannu District and the two tahsils of Bhakkar and Leiah of the old Dera Ismail Khan District were excluded from that province, and formed into a new district called Mianwali (by Government notification No. 995, dated 17th October 1901), with its head-quarters at Mianwali, the principal town of the tahsil of that name, and originally the seat of a Sub-Divisional Officer for Mianwali and Isa Khel. Mianwali (meaning 'of the Mian') was the name given to a hamlet founded by a holy man called Mian Ali (Mian being a title of respect), which forms the nucleus of the head-quarters of the new district. The family grew in importance and the tahsil, which had its head-quarters near the hamlet but was formerly known as Kachchi, came to be called Mianwali. The Bhakkar and Leiah Tahsils also formed a sub-division of the old Dera Ismail Khan District and though this sub-division had been abolished with the formation of the new district, it was re-established again with head-quarters at Bhakkar. The Leiah Tahsil has, however, been subsequently transferred to the Muzaffargarh District, with effect from 1st April 1909 and the Bhakkar Sub-Division now consists of only one tahsil and the Mianwali District contains only three tahsils.

Boundaries.

The district is bounded on the north by the Attock and Kohat Districts, on the west by the Bannu and Dera Ismail Khan Districts and on the south by the tahsil of Leiah, while the Jhang, Shahpur and Attock Districts adjoin it on the east. In the upper half, the district is separated from the North-West Frontier Province by a series of hills encircling the Isa Khel

CHAP. I-A.
Physical aspects.
Boundaries.

Tahsil, which is the only tract with a Pathan population which the Punjab now retains across the Indus. The rest of the western boundary lies in the bed of the Indus. The cis-Indus portion forms the greater part of the Sindh Sagar Doab, *i.e.*, the tract lying between the rivers Jhelum and Indus.

General configuration.

The district as now constituted has a peculiar shape, more or less resembling that of a human bust facing eastwards. The Mianwali Tahsil forms the face and part of the neck with the projection of the Sakesar hill resembling that of a sharp nose. The Isa Khel Tahsil makes the back of the head with the Bhangi Khel projecting at the top like a crest. The Bhakkar Tahsil supplies the lower half of the bust.

Natural divisions.

The two northern tahsils forming the head are so different from the southern tahsil of Bhakkar that it will be best to deal with the two portions separately.

The Northern Tahsils.

At the extreme north of the district and situated between the Indus and the Khattak hills of Kohat is a horn-like projection of the Isa Khel Tahsil known as Bhangi Khel, which is a wild mountainous bit of country consisting of a succession of steep hills and deep ravines, with cultivation on flattened hill tops or sides of ridges or along the beds of the hill-torrents. At the base of this horn, the hills bifurcate, one range known as Maidani or Khattak Niazi going round the north and west of the Isa Khel Tahsil in the form of a bow, until it all but touches a prolongation of the Khisore and Paniala hills of the Dera Ismail Khan District at Dara Tang, a pass cut out by the water of the Kurram river. The Khisore hills stretch along the southern boundary of the Isa Khel Tahsil and then run parallel to the river, forming its right bank down to the southern limit of the Mianwali Tahsil. The other range, cut off from the base by the narrow stream of the Indus, shoots south-east through the Mianwali Tahsil, and is linked with the Salt Range proper at Sakesar. This spur separates from the main portion of it a part of the Mianwali Tahsil known as Khudri, consisting of rough ground full of small hillocks and cut up by ravines and hill-torrents. The tract between this range and the Khattak Niazi is a regular valley encircled by hills. South of this there is light sandy land merging gradually into the Thal of the Khushab Tahsil on the east and that of Bhakkar on the south. In the middle of the valley flows the great river Indus bottled up by the adjoining rocks all along the east of Bhangi Khel and confined to a very narrow channel till it breaks through the fetters at Kalabagh and spreads out, pouring its water over vast areas. The main features of the tract are (1) the surrounding hills which are useful mainly as catchment areas, sup-

CHAP. I-A. Physical aspects. The Northern Tahsils.

plying water through hill-torrents to the plains which form a kind of basin; and (2) the Indus bringing down an immense supply of water and well-known for its vagaries. While the lands above the high banks of the river depend for cultivation mainly on water from the hills or on local rainfall, the floods of the Indus supply moisture to the cultivated lands lying within the extreme limits of its enormous channel. The Kurram, though insignificant compared to the Indus, is yet a formidable stream. It enters the Isa Khel Tahsil at the Tang Pass and flows almost due east through the southern part of that tahsil until it gets lost in the waters of the Indus. Ordinarily it is a small and easily fordable hill-torrent, but it brings very large quantities of water from the Bannu hills during the rains. These floods do not last long, but while the stream is in flood, it is impossible, owing to the rapidity of the current and the extremely unreliable nature of the sand in its bed, to ford it. The stream supplies water, through a number of small canals, to the lands in the south of the Isa Khel Tahsil.

With reference to its physical characteristics, the upper half of the district consists of four large natural divisions: (1) the Bhangi Khel, with its peculiar position and circumstances; (2) the broken-up country severed from the main block by the spur of the Salt Range running from Kalabagh to Sakesar and known as Khudri (rough country) or Pakhar: and the hill encircled plain including the rest of the two tahsils which may be divided into; (3) the valley of the Indus; (4) the uplands lying between the high banks of the Indus and the hills, or at the extreme south of the Mianwali Tahsil, the Thal of Khushab. In the south of the Isa Khel Tahsil the group of villages irrigated from canals taken out of the Kurram river forms a fifth division, not natural but artificial.

The Bhakkar Tahsil.

The southern half of the district consisting of the Bhakkar Tahsil is divided into two large natural divisions: (1) the Indus valley or that part of the tract lying between the two high banks of the Indus which is east of the artificial boundary line dividing the Dera Ismail Khan District from Mianwali; and (2) the Thal, the great sandy desert and prairie lying above the high bank. The river having receded considerably from the high bank the eastern portion of the Indus valley is flooded by means of a system of embankments and channels similar to but more elaborate and extensive than those of Mianwali, while the villages further west receive their spill water direct from the river.

The Thal.

The Thal of the Bhakkar Tahsil is divided into two natural divisions, namely the Thal Kalan and the Daggar.

CHAP. I-A.

Physical aspects.

The Thal.

The whole of this tract comprises an area of 2,551 square miles, the whole of which is, with the exception of a few places where the Indus water flows up into the lower Thal lands, dependent for cultivation on well irrigation. A scanty rainfall, treeless sandy soil and a precarious and scattered pasturage mark this out as one of the most desolate tracts now remaining in the Punjab. Much of it is real desert, barren and lifeless, devoid not only of bird and animal life, but almost of vegetation. Highest to the north, the whole country slopes steadily down towards the south. The Thal Kalan occupies the whole of the eastern portion of the tract. Lines of high sand hills, running for the most part north-east and south-west, alternate with narrow bottoms of soil which in places is stiff and hard, but is more often covered with sand. Towards the middle of the Thal, the hills are lower and the formation much less regular. To the west of the Thal Kalan succeeds the tract which is known as the Daggar. The hills are here lower and less regular, and the sand less marked. But the main feature of the Daggar is its central core, a narrow strip of firm, flat soil, which runs, much as a river might do, from north to south down the centre of the Daggar villages. It is from the line of wells situated in this strip that the Daggar takes its name. West of the Daggar tract is the strip of country (called the Powah) bordering the Indus bank. The latter is some twenty feet in height. The Powah is about three miles broad in the north, where it is of a very broken and sandy nature, but is narrower and flatter to the south. It contains most of the larger riverain villages, which have been built on it out of reach of the river floods. The upland immediately adjacent to the river bank is known as the Dhaha.

Scenery.

The upper half of the district is quite picturesque. The bare hills of Bhangi Khel are generally uninviting, but towards the north of it there are pretty little green stretches of land often full of cultivation and encircled by equally attractive hills, while the ravines are studded with trees and shrubs. The view from these hill-tops is admirable. The ridges are from 2,000 to 4,000 feet above the sea level, the highest peak of the Lakkar hill known as *Sitkai Sir* being over 4,500 feet high. The most picturesque spot in the whole district is Kalabagh where the Indus debouches from the hills. The hills on either side of the river, spreading out like the tail of a scorpion, with a large plain in front and with distant hills in the background, are delightful to the eye. A hamlet called Kukranwala Wandha, lying opposite Mari and a couple of miles above Kalabagh, is an excellent place for watching what is often a most glorious

CHAP.I-A.
Physical aspects.
Scenery.

sunset. The Maidani and Dhak ranges are bare and rugged. The valley of the Indus is practically level and possesses miles and miles of green crops in winter intercepted only by a creek, an island of sand or a thick jungle of reeds. The uplands in the Mianwali and Isa Khel Tahsils are cut up by hill-torrents and while the tract looks desperately arid in a year of drought, the whole country-side is one patch of verdure in a year of good rainfall.

The Khudri tract in the Mianwali Tahsil is as uninteresting to look at as it is difficult to traverse, particularly in the north. The Sakesar hill, however, which is propped up like a pyramid in the centre of an immense practically level tract, is quite green and fairly cool (being 4,992 feet above the sea level). It is the joint sanitarium of three districts, Mianwali, Shahpur and Attock. The name Sakesar appears to be made up of Sv. *Shuk*=parrot and *Ishwar*=God, meaning the parrot God, obviously from the resemblance of the ridge to a long green bird. Getting on the top of the hill on a clear morning, after rain, one beholds a grand panorama stretching up to the Kashmir hills on the north-east with the Indus flowing out on one side and the Jhelum on the other, while the Kohat hills, Sheikh Budin and Takht Suleman form the limit of the field of vision on the north-west and west. On the east one can see far into the flat country and get a glimpse even of the Chenab, while to the south there is nothing to arrest the eye in the great Thal.

Throughout the upper half of the district, the hills at the end of the valley break the monotony of the level plains. But as one crosses the southern boundary of the Mianwali Thal, the scenery becomes dull and one beholds nothing but level land on all sides, with an unending sea of sand on the east. The Indus valley has a verdant appearance with its trees, but up above the high bank trees are confined to certain favoured bits or to wells which are few and far between.

Natural features of the Kachhi tract.

The bed of the Indus is wide and straggling, and all through the cold weather there are broad stretches of barren sand along its course. The creeks and side-channels intersecting the riverain tract have well-defined beds of moderate size, and for the greater part of the year they flow up to their banks. Wells, *jhalars*, and occasional villages are scattered along the sides of these streams, and the cultivated fields come down to the water's edge.

The Indus valley is, on the whole, a pleasant country; about half its area is cultivated, the remainder being overgrown with tall *sar* grass, and, near the river, with low tamarisk (*lai*) jungle. The river islands are often overgrown with a dense jungle of

CHAP. I-A. — Physical aspects. — Natural features of the Kachhi tract.

kanh, which is a favourite cover for wild pig in the Bhakkar Tahsil. For two or three miles from the Thal bank, the country is thickly studded with wells, each well generally having a little hamlet of its own, with its farm sheds and out-houses. The larger villages are found mostly on the Thal bank, overlooking the Indus valley. Here they are beyond the reach of floods. The people who live down in the Kachhi riverain tract are too lazy to move their crops, when cut, to the Thal; they stack them on the higher bits of ground near their wells and villages, in consequence of which they suffer heavy loss in years of high flood. The portion of the Kachhi towards the Indus is generally destitute of wells, the cultivation being all *sailaba*. All through the inner portion of the Kachhi there are almost invariably pleasant clumps of trees round the villages and wells. *Tahlis* and *bers* predominate with an occasional *sarinh* or *pipal*. This part of the country is fairly wooded. The outlying tract towards the Indus has few or no trees, but here and there are stretches of Bhani jungle. There are groves of date palms in the riverain tract of Bhakkar generally near the high bank, the largest being situated round or near the towns.

The Bhakkar Thal is a sandy desert covered generally by a scrub in the form of *lana*, *phog* and *bui* with a sprinkling of *kari* and *jand* trees. In the centre of the Bhakkar Thal there is a large stretch covered with *jal* trees. The Daggar portion of the Thal adjoining the high bank of the river abounds in *jand* and *jal* trees. The *jand* is preserved all over the Thal on and round about the wells, and *khaggal* grows easily where preserved. The wells being scattered about the Thal along the low-lying *laks*, or flat pieces of hard cultivable soil situated between the sand hills, the clusters of trees look like oases in a desert. The sand hills generally run north and south and are larger in size and higher in the south and east of the tract. In the north there is more flat land; so one sees plenty of *barani* cultivation and *chhember*, *sain* and other grasses spring up after rain and afford excellent fodder for cattle. In a year of good rainfall the Thal looks quite cheerful, but in time of drought it is extremely dreary and unwelcome

River system and lakes.

The Indus, piercing the Salt Range immediately above Kalabagh through a narrow channel of its own boring, enters this district and flows placidly on with a fall of about one foot to the mile in a southerly direction for the next forty miles of its course. Freed from its mountain barriers, it rapidly spreads out in the plain, until its bed from bank to bank attains, a few miles above Isa Khel, a maximum width of nearly 13 miles. Within this bed are a net work of shifting channels in one or other of

which the main stream rolls on. About 60 years ago, the great body of the Indus flowed on the Isa Khel side but yet sufficiently far from the high bank to leave between a strip of rich alluvial soil varying from half a mile to two miles in width. By degrees the river encroached on this strip, until shortly after annexation the whole fertile zone had been submerged. About 1856 a change of course commenced, but was so gradual at first as almost to escape notice. Still the main stream was reverting to an old channel on the Mianwali side, and between 1863 and 1864 the process was completed. Hardly then was the important fact that a great river had capriciously shifted its bed about eight miles eastwards fully realized by the district officials. The cause of the reversion is popularly ascribed to the cutting in 1856 of a short canal below Kalabagh to connect an old and almost dry channel on the Mianwali side with the Indus. This diverted some water, and on the 26th August of the following year there came down a tremendous flood, which converted this small cut into a broad deep channel. From 1864 to 1873 the Indus kept hugging its left bank closer and closer, engulfing village after village in its bed, and even undermining its old high bank and eroding the old villages which had crowned it for over one hundred years. Thus Pakki, Mochh, Rokhri, Shahbaz Khel, Yaru Khel, Mianwali (including part of the civil station), Ballu Khel, Kundian and Piplan were partly or wholly destroyed. About 1873 the river relaxed its pressure on its left bank, and made a central set against villages whose lands had been hitherto left untouched, and were consequently the richest and best in its bed.

By the time it passes down from the Mianwali to the Bhakkar Tahsil, the river has lost much of the velocity with which the water rushes forth from the gorge at Kalabagh and throughout the Bhakkar Tahsil confines itself to a more or less defined course. The eastern half of the area between the two high banks is spread over with a network of natural creeks and artificial channels and the flood water spreads over the country through these channels by means of stop dams, under the control of district authorities. The vagaries of the river are limited to the western half of this tract where the spill water spreads unchecked and the main stream keeps shifting about from one place to another. The system of creeks and dams will be described further on.

The only lake of any interest in the district is the Nammal lake, which has been artificially created by the construction of a large dam across a gorge between Nammal and Musa Khel. A description of this is given below in Section F of Chapter III.

CHAP. I. A.
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Physical aspects.
—
Geology.

The district is of considerable geological interest, as it includes both cis-Indus and trans-Indus portions of the Salt Range. The chief points of interest in the series, as exposed here, are the disappearance of the older Palaeozoic beds and the development of Jurassic and Cretaceous rocks. The salt marl and rock-salt still form the lowest member of the series; but as a rule all overlying formations, found in the eastern part of the range between the salt marl and the boulder-bed, are absent. The Jurassic beds are well seen in the Chichali pass where they contain ammonites and belemnites, and are overlain by rocks with Lower Cretaceous fossils. Coal of fair quality occurs in the Lower Tertiary beds in the Isa Khel Tahsil, and salt is quarried at Kalabagh.

The geology of the Dhak Range can be very conveniently studied in a gorge at the eastern end of which the Nammal dam has been constructed. Here there is a Tertiary series, consisting of alternations of soft grey and greenish grey sandstone, and red and brown clays, overlying Nummulitic limestone. This limestone varies greatly in character in different bands. At the site of the dam the limestone dips at 65 to the north-east. The dip, however, decreases in height: in fact, the beds are the eastern arm of an anticline, the top of the arch occurring near the western end of the gorge. Close to the limestone ridge, the Tertiary sandstone and clay have been denuded away, thus forming a longitudinal valley parallel to the ridge. Hot water and sulphurous springs emerge at numerous points in the gorge and are not confined to any one particular formation. There are a number of these just below the site of the Nammal dam. Hot water and sulphurated hydrogen gas issue from numerous cracks in the rock. In some cases hot water rushes out in considerable quantity with a large escape of gas; others issue quietly. The water is covered with a thin film of gypsum and at the bottom of the pools is a deposit of thick black mud.

Botany.

The flora is in part that of the western Punjab, but there is a strong admixture of west Asian and even Mediterranean forms. Trees are scarce except where planted; but the *tahli*, (*Dalbergia sissoo*) is frequent on the Indus. The Salt Range at Kalabagh has a flora of its own, corresponding to that of like situations on the ranges east of the Indus. The Thal sand hills are an extension of the Great Indian Desert, and their flora is largely that of north-western Rajputana. The botanical aspects of the three different parts of the district, the hills, the uplands and the Kacha may conveniently be described separately.

CHAP. I-A Physical aspects. Botany— The hills.

The hills contain but a scanty vegetation, and except on the top of the Sakesar hill, or in the heart of Bhangi Khel, trees are confined to depressions and lowlying slopes. The common trees are the *phulahi* (*Accacia modesta*), *sanatha* (*Dodonea burmanniana*), *kangan* (*Crocus sativus*), *kan* or olive (*Olea Europœa*) *dhaman* (*Grevia elastica*), *kikar* (*Accacia arabica*), *anar* or pomegranate, *khabari* or wild fig tree (*Ficus carica*), *tut* or mulberry, *bohar* (*Ficus Indica*), *jal* (*Salvadora oleoides*).

The hills are, however, rich in plants and shrubs, of which some of the most important are *vinan*, *mastiara* (*Scutellaria lineari*), *hari* (*Armeniaca vulgaris*), *vithaman* (*Celtis coneasica*), *ganger* (*Sageretia brandrethiana*), *kohir*.

In the uplands the common trees are :—

The Uplands.

Tulha or *khaggal* (*Tamarix articulata orientalis*). This grows all over the district and can thrive on very little moisture, but generally has to be planted and always preserved for the first few years. The wood is not of much use.

Kikar (*Accacia arabica*) found in the submontane tracts and near the high banks of the river. The wood is hard and is used for agricultural implements and roofing.

Tahli (*Dalbergia sissoo*) is rare except near the towns.

Jand (*Prosopis spicigera*) is a common tree throughout the Thal especially round wells and villages, where it is preserved for loppings, called *langi*, which afford valuable fodder for sheep and goats. All through the cold weather when the grass supply is shortest, these *jand* trees are gradually lopped of their small branches till nothing is left of them but bare poles. The *langi* is made to last, if possible, for three months, from December to February A few trees kept for shade are left intact and here and there the respect paid to some departed saint preserves the trees round his grave.

Ber (*Zizyphus jujuba*) is planted on wells in the Thal and is prized for its fruit which is eaten.

Jal (*Salvadora oleoides*) is found in great quantities in the Daggar and Thal. The fruit (*pillhu*) is eaten, and the tree affords an important supply of grazing for camels.

Kari (*Caparris aphylla*) or leafless caper is a small tree of tough wood which grows wild and of which the fruit is eaten.

Babbil (*Accacia jacquemonti*) is a small thorny bush which provides grazing for goats.

CHAP. I-A.
Physical aspects.
Botany—The Uplands.

Phog (*Calligonum polygonoides*) is a small leafless woody shrub, upon which sheep and goats graze and which is used as fuel. The fruit (*phogli*) is sometimes eaten, but is unwholesome. *Pipal* (*Ficus religiosa*) is found near towns and habitations.

Bohar (*Ficus indica*) is found near the river banks.

The common shrubs are :—

Lana, a plant which grows well on light sandy soil and is seldom found near *jal* or *phog*, which require firmer soils. *Lana* is a most important shrub in the Thal, where it is the chief food of camels during the summer months, and also affords food in spring to sheep and goats. The Thal *lana* is *haloxylon salicornicum multiflorum* and is to be distinguished from *haloxylon recidivum*, i.e., *Khar*, or *sajji lana*, from which carbonate of soda is made, and also from *lani* (*Suaeda fruticosa*) and the *gora lana* (*Salsola fœtida*) of the Daman.

Khipp (*Crotalaria burhia*) is a small leafless shrub which is common in the Thal. It is only used for fuel or hutting. *Bui* (*Panderia pilosa*) is universal in the sandier parts of the waste. It is a small shrub, which about March throws out a few shoots which sheep and goats only eat when other fodder is scarce. It grows only on light soil.

Akk (*Calotiopis gigantea*) is common. Goats eat the young shoots. *Akri* (*Withania coagulans*) is a smaller plant of much the same appearance as *akk*.

Grasses are numerous and the following are the more common :—

Chhember (*Eleusine flagellifera*) has runners and spikelets which rise to about a foot in height. It springs up in the sand with great rapidity after rain, but dies down equally quickly. It is excellent fodder, and seeds both in spring and autumn.

Sain (probably *Elionurus hirsutus*) is a tall grass, the roots of which usually form a compact clump. It seeds in autumn when it often stands waist high. It is excellent fodder for cattle and horses. There is a variety, called *phitsain*, which throws out twice a year shoots, which are eaten by cattle and sheep. Like *sain* it is confined to the northern Thal.

Among other minor products of the waste Thal area lemon grass (*khavi*) is also found, but is of little value as fodder. Camel thorn (*jawah*) is found in the Daggar, not the Thal. *Bakhra* (*Tribulus aratus*), a small creeping plant with a spiky pod, is fairly common; it is grazed by sheep and goats, and the seeds are eaten by people in time of scarcity. Smaller fodder grasses are *madhana* (named from its resemblance to a churning

CHAP. I-A. Physical aspects. Botany— The Uplands.

stick), a good grazing grass; *dodak*, a creeping grass; *uthpera*, or camel's foot; *gorakpan*, probably *Convolvolus pluricaulis; van veri*, a long creeping grass; *sijubhana*, or sunrise; *nilbuti*, a wild indigo, eaten by camels; *bhattel*, dandelions, found only in the North Thal; *phuli* and *sayahchar*, with a small white flower; *ludri* and *budia*, grasses with spiky heads; *sit* and *trangar*, resembling *bhakra*; *kamali buti*, with a flat thistle-like leaf; *pochki*, a creeping plant with broad round leaves; *nanu*, a bitter vetch, and *hemcha*, a light fragile grass. *Padbahera*, or fungi of all sorts, are common, and mushrooms (*kumbhi*) grow freely on the sand hills in the autumn rains. The larger kind (*kumbhor*) are indigestible. But those called *challi kumbhi* are of fair flavour. *Pippa* is an edible asparagus-like parasite which grows out of the root of *kari* trees; *tandla* is a herb-like growth from the root of *jand* trees; *kortamma* or *tamma*, the yellow colocynth, is common, and is valued for its cooling properties. *Bhukal*, a small leek-like plant, springs up with the wheat on the wells; both the plant itself and its seed are, as elsewhere in the Punjab, eaten by the people in times of scarcity. *Damanh* (*Fagonia cretica*) and *harmal* (*Pegamum harmala*) are small plants of which the seed is used medicinally. *Jaudal* (sometimes called *phitkanak*), *sinji* (*Melilotus parviflora*), *batu* (*Chenopodium album*) are all well-known plants, which here, as elsewhere, spring up wild on the well courses. *Pitpapra* (*Fumaria parviflora*) springs up in the same way, and is used medicinally, as is also a small gourd, *chibhar*, which grows wild among the autumn crops.

The Kacha.

The trees peculiar to the Kacha or riverain tract are :—

Bhan (*Populus Euphratica*), which grows wild on newly-formed land where the accumulation of silt is large. The wood is light and is used for beds, door-frames and roofing.

Lai (*Tamarix dioica*) also grows spontaneously on newly silted up land, but not usually to a large size. The branches are used for thatching and for making screens and the wood for fuel.

Tahli (*Dalbergia sissoo*), *kikar* (*Accacia arabica*) and *ber* (*Zizyphus jujuba*) are also found, but these are usually sown.

The chief plants and grasses are :—

Sarkana, more commonly called *munjkana* (*Saccarum sara*), grows in abundance on newly-formed land and is of considerable utility. The upper part of the stem (*tili*) is used for baskets: its sheath (*munj*) is beaten up to make ropes: the stem (*kana*) is used for fences and hutting and several other uses: the flowers (*bullu*) are given as medicine to cows: *kanh* (*Saccarum spontaneum*) is a

CHAP. I-A. Physical aspects. Botany—The Kacha.

reed that affords excellent fodder and is used for thatching.

Kundr (*Typha augustifolia*), the bulrush, grows on banks and creeks and in shallow water. It is used largely for making mats, baskets and strings.

Talla (*Cynodon dactylon*), the best fodder grass for horses, and also eaten by cattle.

Drabh (*Cragrostis cynosuroides*), a coarsegrass, which grows even on salt infected land. It has long roots and is very tenacious. It is eaten by cattle, but is poor fodder.

The following are among the commoner weeds :—

Sinji, *maina*, *jawanh* or camel-thorn, *lihu*, a thistle, *johdra* (wild oats), *ozi*, and *khivi*.

Dates and garden trees.

Gardens exist in Bhakkar near the high bank and in the towns of Kalabagh and Isa Khel. The common garden trees are mangoes, oranges, pomegranates, mulberries, lemons, loquats, pears and grapes.

Date trees grow in the Bhakkar Tahsil, mostly roundabout the high bank. Every part of a date tree has a separate name. The date palm itself is known as *khajji*. The stem, while standing, is *mundh* ; when cut down and trimmed of its branches, *chhanda*. A grove of trees is called *jhatt*. The leaf-stalk is *chhari*, the network fibre which is formed round each leaf-stem is *kabal*. The cluster of leaves at the top of the palm is *gacha*. The cabbage-like cluster of leaves inside the *gacha* is *gari* : the thorns are *thua* : the fruit has various names according to the stage of ripeness attained, and when ripe is known as *pind*.

Fauna—Tigers.

Tigers used to be met with in the jungles adjoining the Khisor hills, between Isa Khel and Bilot, but have now become extinct.

Leopards, called *Parra*.

Leopards or hill panthers are found in the Salt Range, but they generally appear one at a time and are shot occasionally, when they make themselves conspicuous.

Bears.

There are no bears in the district, but in exceptionally severe winters stray black bears sometimes come down from the north-west, and have been seen once or twice on this side of the Maidani Range.

Wolves.

Wolves abound on the skirts of the low hills, and travel down at night to jungles in the riverain tracts, where they sometimes get under cover during the day. They are, however, not numerous and if spotted are hunted down or shot.

CHAP. I-A. Physical aspects. Fauna—Hyenas.

Hyenas are also found along the low-lying hills. They are caught by a man walking or creeping into the den with a *chiragh* (light) in one hand and a rope tied into a noose in the other, and putting the noose round the hyena's neck while he keeps looking at the light. The man then retreats with the light still in his hand, and coming out of the den pulls at the rope and with the help of his comrades drags the hyena out and secures him.

Huriar.

The *Huriar* (Oorial), *Ovis Vignei* or *Ovis cycloceros*, is met with in large numbers in the Salt Range, the Bhangi Khel and the Paniala Hills. The Malik of Kalabagh's preserve at Jaba in the Salt Range being a favourite resort of these animals, Jaba is visited very frequently by sportsmen, with the permission of the Malik. Heads with 20 to 25 inch horns are common, and 25 to 30 inch horns are considered good, but are not so very rare.

A young *Huriar* is called *Chapra.*

Markhor.

Markhor (*Capra talconeri* or *Capra megaceros*) is rare, its habitat being the barren inaccessible hill between Kalabagh and Khartop (Bhangi Khel). Breeding is supposed to take place punctually on the 1st *Baisakh* and the Khattaks climb up on *Baisakhi* day to the inaccessible recesses which they have previously observed and carry away the young ones. This practice, however, unsportmanlike brings considerable profit to the man who secures the *markhor* kids and sells them.

Haran.

The Thal is full of Ravine deer or *chinkara*, called *haran* in this district, and they are also found all along the foot of the Salt Range, sometimes also running up to the Sakesar hill.

Parha and *Mirhon.*

The *parha* or hogdeer is found in the riverain tract of the Bhakkar Tahsil in the jungles lying near the river stream, as also are *mirhon* (wild boar). They are shot or netted, the ground not being suited to riding them.

Other land animals.

Foxes (*lumbar*) are common in the Thal, hares (*saihyar*) in the riverain tract and near the high banks, jackals (*giddar*) in the Kacha, mongoose (*naulun*) and hedgehogs (*jah*) everywhere.

Water animals.

Crocodiles (*sisar*) are common in the Indus. They are seen basking in the sun on little islands of sand near deep water. They are, however, mostly a small variety and seldom exceed 16 feet in length. The porpoise (*bulhan*) lives in the deep stream of the river and is seen plunging out and back into the water as one crosses the ferries or floats down the river by boat. Otters (*luddar*) are found in some creeks and are caught by *Kehals* and used as bait for *bulhans.*

CHAP.I-A. Physical aspects. Fauna—Birds—Bustard.

The following are the game birds found in the district :—

1. *The Great Indian Bustard—Teg.*—A pair or two come to the district every year and usually make a short stay in the Thal between Wan Bhachran and Bhakkar.

2. *The Houbara Bustard—Tiloor*—Begins to come down from the hills towards the end of September, and is usually found all over the Thal and also in the drier bits of the Kacha, particularly in the northern half of the district. October and November are the best months. By December they get shot out or snared or leave the place.

3. *The Lesser Bustard—Cho i Tiloor*—Is a smaller variety of *tiloor* and is found with the *iloor* proper.

Sand-grouse.

1. Imperial or the large black bellied sand-grouse, called *salar* or *wadda bhattittar* or *khatakkar*, comes in large flights in October and after a short stay in the district travels east. It returns in February and March on its way back to the hills.

2. The Pintail }
3. The Common } Sand-grouse, called *Chota Bhattittar.* —

These birds are less numerous, but some of them breed in the district and are found here all the year round.

Partridge.

1. *Chikor* (hill partridge) is found in the Sakesar hills, at Jaba and in Bhangi Khel.

2. *Sussi* (*Susie* partridge) is found at the foot of the hills and in stony country all over the upper half of the district.

3. *Mushki tittar* (black partridge) abounds in and near the hills and in the Thal, being found also in smaller numbers in the Kacha.

Pigeon.

1. The Imperial hill pigeon or wood pigeon, called *lotan*, is found only in the Sakesar hill.

2. Blue Rock *kalbutar.*—The pigeons are seen in large flights in the upper half of the district. They descend from the hills and go back.

3. Nesters, also called *kalbutar*, are found in ruins, old wells and old trees. They live usually in pairs.

Quails.

Quails visit the district in enormous numbers in spring and autumn and are netted by the hundred. The flights include quail of several varieties. There are also bush and other quail indigenous to the district.

CHAP.I-A. Physical aspects

Fauna — Birds — Plovers.

Plovers, called *rerhas*, are of the following kinds :—

1. The Indian courier plover ;
2. The cream-coloured courier ;
3. The small swallow ;
4. The grey ;
5. The large stone plover (called *kerwanak*). According to some authorities it is a lapwing.

Lapwings.

The following lapwings (*tatihar*) are seen in the district :—

1. The crested ;
2. The black-sided ;
3. The whole tailed ;
4. The split winged ;
5. The red wattled.

Starlings.

Two kinds of starlings (*Tillyar*) are seen—

1. The black, and
2. The pink breasted.

Kunj.

The *kunj* (cranes) are of two kinds :—

1. The grey, called *kunj*, which is a large bird, and
2. The demoiselle crane, called *kurkana*, which is a somewhat smaller bird.

Kunj is caught in large numbers by Pathans living near the high banks of the river between Kalabagh and Mianwali. Flights pass over this part of the river on their way to and back from the Punjab and either settle in the Kachhi for the night or fly very low over the sands. Parties of young men go out at night and try to meet flights passing over their heads. They carry *sah* (which consists of a bullet of lead attached to a long string) and fling the lead up into the flight keeping the end of the string tight in the left hand. The lead travels down in a semicircle passing the string round the neck or wings of the crane which is pulled down. This is considered great sport and parties return in the morning with large bags. As many as 80 have been caught by the young men of one village in one night, and even more, if report be true.

Snipe

The *chaha* (snipe) is met with on the river creeks. The

1. Common,
2. Jack and
3. Painted

snipe are seen.

Geese.

Mangh (geese) are of two kinds :—

(1) Grey and
(2) Bar-headed.

They are found in large numbers in the Kacha in winter, but are somewhat difficult to get at.

CHAP. I-A.

Physical aspects.

Fauna—Birds—Duck.

The following is a list of the commoner varieties of duck (*murghabi*, or *mugrabi* as it is commonly called) found on the Indus and its creeks :—

1. The Brahmany duck or *surkhab* (*chakwa*).
2. The smew.
3. Stiff-tail.
4. Red-crested pochard or *lal sir*.
5. Red-headed pochard or *lal sir*.
6. White-eyed pochard or *ruhare*.
7. Ruddy sheldrake or *dachi*.
8. Common sheldrake or *dachi*.
9. Widgeon or *choti lal sir*.
10. Shoveller or *gena*.
11. Pintail or *san*.
12. Mallard or *nil sar*.
13. Spotted bill or *hanjhal*.
14. Gadwall or *buar*.
15. Garganey teal or *tetri* (or *chhoti*).
16. Common teal or *karara*.

Other birds.

Stints, sand pipers, green-shanks, bar tailed godwits, curlews, whimbrels, avocets, skimmers are met with and also—

Bittern	*Nardur.*
Dove	*Gera.*
Sparrow	*Chiri.*
Hoopoe	*Hud-hud.*
Wood-pecker	*Drakhan pakki.*
Coot	*Jal kakari.*
Warty-headed ibis	*Kanwani.*
Tern	*Karahi.*
Pelican	*Pain.*
Crow	*Kan.*
Raven	*Dodar.*
Lark	*Chandur.*
Kite	*Hill.*
Vulture	*Gijjh.*
Blue jay	*Chan.*

CHAP. 1-A — Physical aspects. — Fauna—Birds—Other birds.

Magpie ...	... *Matab.*
Babbler ...	... *Herha.*
Parrot ...	... *Tota.*
Shrike ...	... *Malala.*
King crow ...	... *Kal karachhi.*
Swallow ...	... *Ababil.*
King-fisher ...	... *Toba.*
Paddy bird ...	... *Bag.*
Avadavat ...	... *Lali.*
Heron ...	... *Sanh.*
Owl ...	... *Ghugh.*
Owlet ...	... *Chirbil.*
Nightingale ...	... *Bulbul.*
Large Crane ...	... *Dhing.*

The hawks found are :—

1. *Shihan* or *shahin* ... Eagle.
2. *Katta baz.*
3. *Jurra.*
4. *Lagar.*
5. *Charagh.*
6. *Bahri.*
7. *Basha.*
8. *Shikra.*
9. *Tumtari.*
10. *Chuhemar.*

Reptiles.

The smaller reptiles are :—

Kumma ...	... Tortoise.
Goh ...	... Iguana.
Sanhan ...	... A large lizzard eaten by Chuhras and Kutanas.
Kirrari ...	... The common house lizzard.
Sarpitti ...	... A small thin lizzard.
Saddar ...	... Chameleon, supposed to be most venomous, but really quite harmless.
Dadd ...	... Frog.

Snakes.

All kinds of snakes are called *nang*. Cobras are very rare. Snakes are plentiful near the hills, some of them being poisonous.

CHAP. 1-A.
Physical aspects
Fauna—Insects.

The insects which force themselves on one's notice are—

1. *Makri* or *locusts*.—Swarms of locusts often visit the district causing heavy damage to the crops, as well as the trees. The district affords some very convenient breeding ground for locusts, and if they happen to be passing through at breeding time, they settle down on the low sand hills of the Thal or on soft sandy soil in and about the hill-torrent beds and lay their eggs there. The hoppers when they are out cause great destruction.
2. The *tiddi* or grass-hopper is found all over the district and destroys young crops.
3. *Danwar* or spider is also very common.
4. *Vathuan* or scorpion is found everywhere and is more troublesome in the hot weather, particularly during the rains.
5. *Sivi* (white ant) is the most troublesome pest of the district. It not only eats up all kinds of wood and paper, but in years of insufficient rain eats up the crops. The trees form no exception and, unless the white ants are scraped off every now and then, one finds a tree eaten up gradually. Special precautions have to be taken to keep white ants out of record-rooms.
6. *Kankoil* or centipede is not so very common here as in other districts of the Punjab.
7. *Makora* (large black ant) is a household insect all over the district and is extremely annoying.
8. *Makkhi* (bee) lives mostly in the hills. Honey (*makhyon*) is collected for eating.
9. The common fly (also called *makkhi*) is very troublesome in summer.
10. *Machhar* (mosquitoes) are plentiful in the Kachhi, and in other places where there is plenty of vegetation.

Fish.

The following fish are caught in the Indus and its creeks :—

Local names.		English or Scientific names.
Damrah or *Rohu*	...	Labeo rohita.
Machani or *Kala Bans*	...	Labeo calbasu.
Soni ...	...	Labeo cursa.
Thaila ...	...	Catla buchhanani.

CHAP.I-A.

Physical aspects.

Fauna—Fish.

Local names.		English or Scientific names.
Mori	...	... Cirrhina nurigala.
Singara	...	... Macrones aor.
Khaga	...	... Callichrous chechra.
Saul	...	... A nasty looking fish with a head like a snake.
Malli	...	... Wallagus atlu.
Bhatti	...	... Notopterus chitala.

Climate.

In describing the climate the district has to be dealt with in three parts :—(1) The hills, (2) the hill-encircled plain in the upper half of the district, (2) the southern half.

Sakesar, which is the sanitarium of the district, is 4,992 feet above the sea level and is fairly cool throughout the summer. The day temperature ordinarily varies from 65° to 85°, seldom rising above 90°. In very hot years *pankhas* are sometimes worked for about two hours in the afternoon, in June and July, till the rains set in, but they are a luxury and not an absolute necessity. There are certain places in the Bhangi Khel hills which are from 3 to 4 thousand feet above the sea level, and are fairly cool. Kalabagh, lying at the foot of the Bhangi Khel hills, affords a pleasant refuge as regards temperature. On the right bank of the river the temperature under the big *bor* trees varies from 76° to 90° in the hottest days of summer going down as low as 65° during the night, but this low temperature is due to the proximity of the river water which maintains a temperature of 65° to 68° throughout the summer, and is therefore confined to a distance of about 30 feet from the water, beyond which the temperature is as high as in other parts of the plain. Within this zone a soft cold breeze springs up from the river and is very delightful to sleep in, although sleeping continuously in the damp causes malaria. In the hill-encircled plains of the upper half of the district, as well as the part lying east of the Dhak Range, the day is very hot, the temperature in closed rooms often rising up to 100°, and that under shade going up from 110° to something like 115°. It is quite close in the evenings, but after 8 or 9 P.M. a breeze usually springs up, making the nights bearable. Throughout the summer there are generally not more than 8 or 10 bad nights, and whenever it gets very hot, a dust-storm cools down the temperature. In the lower half of the district the day is equally hot, but the nights are much worse. Dust-storms begin early in April and continue more or less regularly until the rains set in. The winter is very bracing all through the district. In the Kacha it

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is bitterly cold in the morning, and in the sub-montane tracts the cold is severe. Once every few years the winter is chilly. Sakesar gets a fall of snow almost every year, but in exceptional years all the Bhangi Khel hills and the higher peaks of the Khatak Niazi or the Maidani Range also get a few falls, and even some of the peaks of the Dhak Range lying within 10 to 12 miles of Mianwali town are clad white once or twice. In such years the frosts are very severe and they do lots of damage to crops and trees. In the Mianwali station fires are usually kept on till about the 15th of March, when there is a sudden change, and *pankhas* have often to be started on the 1st of April. Ordinarily it begins to warm up towards the beginning of March, but rain or cold winds lower the temperature and keep it cool till the end of the month. Sometimes when there is plenty of rain at the beginning of April the day temperature comes down to 65°. But this change is only temporary and it warms up as soon as the clouds are off. April is usually a pleasant month and May is not very bad, but June and July are very trying throughout the plains. Once the rains set in the scorching winds cease, and if there are a few showers at intervals the rest of the summer becomes easier to put up with. In September the nights begin to get cooler, and although *pankhas* are generally kept on till the middle of October the weather is not oppressive after the first of that month. Then there is again a sudden change, and fires have to be started about the beginning of November.

Rainfall.

Tables 3 to 5 of Part B show the rainfall of the district. The north-east of the district being nearest to the hills, the rainfall is heaviest in the Mianwali Tahsil. It is slightly less in Isa Khel, and decreases considerably in the Bhakkar Tahsil.

The approximate annual averages for 12 years ending with 1913-14 are :—

	Inches.
Mianwali	11·92
Isa Khel	11·00
Bhakkar	10·66

The Bhangi Khel, being the highest and most northern part of the Mianwali Tahsil, receives more rain than either Isa Khel or Mianwali, and the Khudri tract of the Mianwali Tahsil, lying east of the Dhak Range, is also somewhat more favoured than the rest of the Mianwali plain.

July and August are the most rainy months and there is generally some rain in June and September. The months of October to December are practically rainless. The winter rains fall

during the months of January to April and a little rain also falls sometimes in May.

CHAP. I-B.

History.

Rainfall.

The rainfall is very uncertain. In the southern tahsil some years pass without a drop of rain, while in others the total rainfall is not more than 1, 2 or 3 inches. In the northern tahsils too the minimum rainfall is 5 or 6 inches. The maximum recorded in the past 12 years is :—

	Inches.
Mianwali	19·38
Isa Khel	15·95
Bhakkar	18·52

Cyclones, earthquakes and floods.

No regular cyclones pass over the district. Dust-storms are common in summer, and some of them are of very considerable force, carrying away trees and thatched roofs before them. But on the whole they are not very destructive. There is no record of unusually forcible dust-storms.

Earthquakes are not frequent. Shocks are felt occasionally, but they are very slight. The memorable earthquake of the morning of 4th April 1905, which destroyed Dharmsala and had such disastrous effects in some towns of the Punjab, was felt only as a sharp shock lasting about half a minute.

The floods of the Indus when very high cause much damage to lands on the banks of the main stream. There is an unusually heavy flood once in every few years. No systematic record has been kept. The highest flood of 1906 was one of the biggest known. Telegrams are often received from Kashmir, intimating the possibility of an extraordinary flood owing to the blocking up of some of the feeders of the Indus by a land slip, or the advance of an immense volume of water in consequence of the breaking up of some glacier high up in the north-west of Kashmir. But oftener than not the pressure disappears by the time the water travels down to Kalabagh, where the rise registered is only a foot or two, and it frequently happens that the flood has passed down long before the telegram of warning is received.

Severe hailstorms are not uncommon in the district. Hailstones as large and as hard as golf balls fall in immense quantities and all the crops within range of their course are totally devastated.

Section B.—History

Early history.

Of the early history of the district nothing can be stated with any certainty, beyond the fact that its inhabitants were Hindus, and that before the Christian era the country formed an in-

CHAP. I-B. — History. — Early history.

tegral portion of the Græco-Bactrian Empire of Kabul and the Punjab.

The Thal, however, without wells would be a desert, and the probability is that in early historic times nearly the whole of it was a barren waste. There is no record of any plundering expedition on the Thal side by Alexander the Great's forces, when they passed down the Jhelum to its junction with the Indus, though they lightly undertook such an expedition across the waterless Bar to the Ravi. This affords a presumption that the Thal was then a poorer country than it is now.

Architectural objects and remains.

In the southern part of the district the general absence of antiquarian remains also tends to prove that it can never have been the site of a rich and populous Government. In the Kachhi tract, of course, such remains could not survive the action of river floods, and this tract must, at one time, have been much wider than it is now. The Thal, however, is admirably suited for the preservation of antiquarian relics, had any such ever existed, but there are none that date from earlier than the fourteenth century.

Ruins of Kafirkot.

Further north, the remains at Mari and, in the Dera Ismail Khan District, at Kafirkot, are indications of the existence of a Hindu civilization of considerable importance and antiquity.

The Kafirkot ruins consist of two forts, situated on the skirts of the district on small hills attached to the lower spurs of the Khasor Range, and overlooking the Indus. One lies a few miles south of Kundal and the other near Bilot. These forts are of great antiquity and interest. Their main features are an outer defensive wall, consisting of rough blocks of stone, some of great size, and various groups of buildings resembling small Hindu temples and more or less carved. These are built of a curiously honey-combed drab-coloured stone not to be found in the adjacent hills, which is said to have been brought by river all the way from Khushalgarh. The area of the forts is considerable and they could have held a fairly large garrison. The only legends attached to them relate that they were occupied by the last of the Hindu Rajas, Til and Bil; but all traces of rulers and ruled are now lost.

Ruins at Mari.

At Mari in the Mianwali Tahsil there is a picturesque Hindu ruin, crowning the gypsum hill, locally called Maniot (from Manikot, meaning 'fort of jewels'), on which "the Kalabagh diamonds" are found. The ruins themselves must once have been extensive. It appears that the very top of the hill was built over with a large palace or fort. The massive walls belonging to one of the rooms, which still stands out of the débris in an

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History.
Architectural objects and remains—Ruins at Mari.

almost tottering condition, and the ornamental carving thereon, testify to the magnitude of the building and the skill employed in its construction. Lower down the eastern slope, there are two small temple shaped buildings of the same style and material, similar to those found at the two Kafir Kots. These buildings were either temples or out-offices serving as sentinel's posts. The local account of these ruins is that the structures were erected by the Pandavas while they were in exile. If there is any truth in this, they should date from the Mahabharat time. There is no evidence, however, justifying the assignment of so old an origin to them. Some *fakir* is known to have taken up his abode on this hill at a more recent date. At his death, he was cremated there, and his remains deposited in one of the temple-shaped buildings, and probably the remains of one of his disciples were interred in the other. These temples are now revered by the Hindus as the *samadh* of that *fakir*, who is known as Naga Arjan or Naga Uddhar. There are no traces of massive fortifications here like those at Kafir Kot Til Raja, but some people still living have seen remains of arrangements for lifting water out of the river. Old coins have been found among the ruins from time to time. The silver coins found are said to be about the size of a four-anna piece with the impression of a horse on one side and that of a bullock on the other.

Remains at Rokhri.

Some time ago encroachments of the Indus on the Mianwali plain laid bare, and then engulfed, masses of stone at a depth of some 10 or 15 feet below the level surface of the high bank. In 1868 the river retired, before it had quite washed away the remains it had exposed, and there were found at Rokhri a number of heads apparently cast in some kind of plaster and one mutilated figure of the trunk of a human body made in similar material, also a quantity of copper coins, fragments of pottery, ivory, etc. The ruins discovered consisted of portions of two circular walls, composed of blocks of stone, and large well-shapen burnt bricks, over which was a layer of white plaster, many fragments of which were found profusely ornamented with thin gold scroll work. The statues, which have clear-cut and well-shapen features, suggest Greek rather than Hindu art. Other finds of similar nature have also been made subsequently in this neighbourhood, especially in the course of excavation of small wells for the manufacture of saltpetre. These finds include old coins, bricks, remains of masonry, large earthen vessels, and clay pipes used as aqueducts. The indications point to the previous existence at this spot of a prosperous town.

Ruins of Sirkapp fort.

Overlooking the village site of Nammal in the Khudri is a

CHAP. I-B. History. Architectural objects and remains—Ruins of Sirkapp fort.

ridge of great natural strength, cut off on three sides by hill torrents. On the top of this ridge there are extensive ruins of what is said to have been the stronghold of Sirkapp, Raja of the country, who was a contemporary of Raja Risalu of Sialkot, by whom he was vanquished. The outer wall of the fort still exists in parts in a dilapidated condition, but the enclosure, which must once have contained accommodation for a fairly large garrison, is now one mass of fallen houses and piles of hewn or chiselled stones. The series of lifts, made for carrying water from the bed of the stream to the top of the hill, have left their marks.

Other antiquities.

The above, together with two sentry-box like buildings, supposed to be *dolmens*, midway between Nammal and Sakesar, and several massive looking tombs, constructed of large blocks of dressed stone in the Salt Range, comprise all the antiquities above ground in the district. No doubt many remain concealed beneath the surface. The encroachments of the Indus and even of the Kurram near Isa Khel often expose portions of ancient masonry arches and wells.

The only other antiquity worth mentioning is a monster *baoli* at Wanbhachran, said to have been built by order of Sher Shah. It is in good preservation and similar to those in the Shahpur district.

Immigrations.

The district has been settled by a triple immigration from opposite directions, of Awans from the north-east, of Jats and Biluches up the valley of the Indus from the south, and of Pathans from the north-west.

The Awans.

The Awans now occupy that part of the district which lies east of the Dhak spur of the Salt Range and is known as Khudri, Pakhar, or Awankari. They have been almost the sole occupants of that extensive tract for at least six hundred years and may perhaps have resided there since the Arab invasions of the seventh century; but as to whether they originally came from Arabia, as they claim to have done, is more than doubtful. Indeed the probabilities are that they migrated from the east and were descended originally from Rajputs, who did not maintain their caste owing to intermarriage with lower clans. That Pakhar was once a stronghold of Rajputs is obvious from the ruins of Raja Sirkapp's fort on the hillock overlooking Nammal and the legends connecting him with Raja Risalu of Sialkot, which are sung to this day. The names of the ancestors of different *warhis* or sub-clans, which have been handed down to tradition, such as Sig Singh, Nar Singh, Bhag Singh, also strengthen the theory of a Rajput origin.

Previous to the decline and extinction of Ghakkar authority

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Immigrations—The Awans. The Jat and Biluch immigration.

in Mianwali, the Awan possessions extended westward of the Salt Range. But the advancing Niazai tide compelled them to retire before it, and for upwards of one hundred years past the mountain barrier, which runs from Sakesar to Kalabagh, has here abruptly marked the limits of Pathan expansion to the east and Awan contraction to the west.

Before the fifteenth century the lower portion of the district was probably occupied by a few scattered tribes of Jats, depending on their cattle for subsistence. The valley of the Indus was a dense jungle, swarming with pig and hog-deer, and frequented by numerous tigers; while the Thal must have been almost unoccupied.

All the traditions of the people go to show that an immigration of mixed tribes of Jats (Siyars, Chhinas, Khokars, &c.,) set in about the beginning of the 15th century from the Multan and Bahawalpur direction. They gradually passed up the valley of the Indus to the Mianwali Tahsil, occupying the intervening country. Most of their villages would have been located on the edge of the Thal and a portion of the immigrants probably crossed the river and settled along its right bank. After these came the Biluches. They also came from the south, but in large bands under recognized leaders, and they appear to have taken military rather than proprietary possession of the country. They were the ruling caste, and served under their chiefs in the perpetual little wars that were then going on in every direction. It is probable that the Jat immigration continued for some time after the Biluches first came into the country. However it may have been, all the Kachhi, immediately adjoining the Thal bank, seems to have been parcelled off to Jat families. Each block was accompanied with a long strip of Thal to the back. These estates are the origin of the present *mauz s* as far north as Kundian in the Mianwali Tahsil. They are almost all held by Jats. Here and there, shares are held by Biluches, but these have mostly been acquired in later times by purchase. In the same way the unoccupied lands towards the river were divided off into blocks, and formed into separate estates; and sometimes, where the *hads* first formed had too much waste land, new *hads* were formed in later times by separating off outlying portions of the old estates. This division into *hads* extended right up to Kundian. In course of time, as the Biluches settled down in the country, individuals acquired plots of land for wells, but generally in subordination to the *had* proprietors or lords of manors. Here and there a small clan settled down together, but this was the exception. Biluches are still tolerably numerous all through the southern part of the

CHAP. I-B. History. Immigrations—The Jat and Biluch immigrations.

Kachhi, up to Darya Khan; but though they were originally the ruling race, still, as regards proprietary rights in the land, they hold a position inferior to that of the Jats and Sayyads, by whom the superior proprietorship of *hads* is generally held. North of Darya Khan there are very few Biluches. In the Thal the population is nearly entirely Jat. The Mamdanis of Khansar, the Magassis, a tribe which came in very early, and settled in the eastern Thal about Dhingana and Haidarabad, and the Zurranis of Dab in the Mianwali Tahsil, are almost the only considerable bodies of Biluches to be found in the Thal.

All through the Kachhi the mass of the villages are named after Jat families, who form the bulk of the proprietors. These are generally the descendants of the original founders, and have stuck together. In the Thal there are a large number of villages held in the same way by men of particular families; but in most the population is very mixed, nearly every well being held by a man of a different caste. The only Jat tribes in the Thal deserving of special mention are the Chhinas and Bhidwals. The Chhina country extends across from Chhina, Behal and Notak, on the edge of the Kachhi, to Mankera and Haidarabad on the further side of the Thal. The Bhidwals possess a somewhat smaller tract round Karluwala and Mahni in the neighbourhood of the Jhang border. They have always been a good fighting tribe.

The Pathan immigrations.

Mahmud of Ghazni is said to have ravaged the upper half of the district together with Bannu, expelling its Hindu inhabitants and reducing the country to a desert. Hence there was no one left, capable of opposing the settlement of immigrant tribes from across the border. The series of Afghan immigrations into Bannu took place in the following order:—

(1) The Bannuchis, who about five hundred years ago displaced two small tribes of Mangals and Hannis, of whom little is known, as well as a settlement of Khataks, from the then marshy but fertile country on either bank of the Kurram.

(2) The Niazais, who some hundred and fifty years later spread from Tank over the plain now called Marwat, then sparsely inhabited by pastoral Jats.

(3) The Marwats, a younger branch of the same tribe, who within one hundred years of the Niazai colonization of Marwat, followed in their wake, and drove them farther eastward into the countries now known as Isa Khel and Mianwali, the former of which the Niazais occupied after expelling the Awans they found there, and reducing the miscellaneous Jat inhabitants to quasi-serfdom.

CHAP. I-B. History. Immigrations—The Niazais.

The Bannuchis must have settled down for nearly two centuries, before the Niazai irruption into Marwat took place. The Niazais are Lodis and occupied the hills about Salghar, which are now held by the Suleman Khels, until a feud with the Ghilzais compelled them to migrate elsewhere. Marching south by east, the expelled tribe found a temporary resting place in Tank. There the Niazais lived for several generations, occupying themselves as traders and carriers, as do their kinsmen the Lohani Pawindahs in the present day. At length towards the close of the fifteenth century, numbers spread north into the plain now known as Marwat, and squatted there as graziers, and perhaps too as cultivators, on the banks of the Kurram and Gambila, some fifteen miles below the Bannuchi Settlements. There they lived in peace for about fifty years, when the Marwat Lohanis, a younger branch of the Lodi group, swarmed into the country after them, defeated them in battle, and drove them across the Kurram at Tang Darra, in the valley beyond which they found a final home. At the time of the Niazai irruption, Marwat seems to have been almost uninhabited, except by a sprinkling of pastoral Jats; but the bank of the Indus apparently supported a considerable Jat and Awan population. The most important sections of the expelled Niazais were the Isakhel, Mushanis and a portion of the Sarhangs. The first named took root in the south of their new country and shortly developed into agriculturists; the second settled farther to the north round about Kamar Mushani, and seem for a time to have led a pastoral life; of the Sarhangs, some took up their abode at Sultan Khel, while others, after drifting about for several generations, permanently established themselves cis-Indus on the destruction of the Ghakkar stronghold of Muazzam Nagar by one of Ahmad Shah's lieutenants. That event occurred about 1748, and with it terminated the long connection of the Ghakkars with Mianwali. They seem to have been dominant in the northern parts of the country even before the Emperor Akbar presented it in *jagir* to two of their chiefs. During the civil commotions of Jehangir's reign the Niazais are said to have driven the Ghakkars across the Salt Range, and though, in the following reign, the latter recovered their position, still their hold on the country was precarious, and came to an end about the middle of the 18th century as stated above. The remains of Muazzam Nagar, their local capital, were visible on the left high bank of the Indus about six miles south of Mianwali, until the site was eroded by the river about the year 1870. The Niazais thus established themselves in Isa Khel over three hundred years ago, but their Sarhang branch did not finally obtain its present possessions in Mianwali, until nearly 150 years

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later. The acquisition of their cis-Indus possessions was necessarily gradual, the country having a settled, though weak Government, and being inhabited by Awans and Jats.

Immigrations—The Niazais. Khattaks and Bhangi Khels.

A few of the Khattaks, who had preceded the Niazais into the Isa Khel Tahsil, clung to the foot of the Maidani Range, and could not be driven out by the Niazais. The Bhangi Khels, a strong little section of Khattaks, spread up into the Bhangi Khel tract some 400 years ago, and remain there to this day.

Biluchch Pathans.

A few families of Biluchch Pathans came across the Indus from the Paniala Hills. Of these, one became dominant at Piplan, while the others moved on into the Thal and took up their abode eventually in and about Jandanwala.

The rule of the Ghakkars in the north.

Prior to the invasion of Nadir Shah in 1738, there is little to relate concerning the history of the northern portion of the district. The upper half of the district was ruled by the Ghakkars, who became feudatories of the Mughal Empire, of which the district continued to form a part until the invasion of Nadir Shah.

Invasion of Nadir Shah, 1738.

In 1738 a portion of his army entered Bånnu, and by its atrocities so cowed the Bannuchis and Marwats that a heavy tribute was raised from them. Another portion of the army crossed the Pezu pass and worked its way down to Dera Ismail Khan. The country was generally plundered and contingents raised from the neighbourhoods of Bannu and Dera Ismail Khan marched under Nadir Shah's banner to the sack of Delhi. In 1739 the country west of the Indus was surrendered by the Emperor of Delhi to Nadir Shah, and passed after his death to Ahmad Shah Abdali.

Expulsion of the Ghakkars in 1748.

In 1748 a Durrani army under one of Ahmad Shah's generals crossed the Indus at Kalabagh, and drove out the Ghakkars, who still ruled in the cis-Indus tracts of the district, owing nominal allegiance to the Emperor at Delhi. Their stronghold, Muazzam Nagar, was razed to the ground, and with their expulsion was swept away the last vestige of authority of the Mughal Emperor in these parts.

The district incorporated in the Durrani Kingdom in 1756.

The armies of Ahmad Shah marched repeatedly through the district, the cis-Indus portion of which was, with the rest of the Punjab, incorporated in the Durrani Kingdom in 1756, and for the next sixty years a precarious hold was maintained on their eastern provinces, including this district, by Ahmad Shah and his successors to the throne of the newly created Kingdom of Kabul.

The southern portion of the district.

The history of the Bhakkar Tahsil, comprising the southern portion of the district both in the period which preceded and that which followed the incorporation of the district in the

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Durrani Kingdom, requires separate recording. Its history is bound up with that of Dera Ismail Khan and of Leiah, and to some extent with that of Dera Ghazi Khan.

The southern portion of the district—The Dodais and Hots.

During the greater portion of the reign of Ahmad Shah, no regular Governors were appointed by the Kabul Government. The country was divided between the Hot and Jaskani chiefs, whose predecessors had been the first Biluch chiefs to form settlements along the Indus.

Settlement of the early Biluch chiefs who founded Dera Ismail Khan and Dera Ghazi Khan

References to the original settlements of the first Biluch chiefs are found in *Ferishta* and in a Persian manuscript, quoted in Mr. Tucker's settlement report of the Dera Ismail Khan District. The account given by the latter is, that in 874 *Hijri* (A. D. 1469) Sultan Husain, son of Kutubudin, obtained the Government of Multan. He held the forts of Shor and Chiniot in Lyallpur District and of Kot Karor (Karor Lal Isan) and Din Kot (near Kalabagh). Soon after Malik Suhrab, a Dodai Biluch, along with his son, Ismail Khan, and Fatih Khan and others of his tribe arrived from Kech Mekran, and entered the service of Sultan Husain. As the hill robbers were then becoming very troublesome in the province of Multan, Sultan Husain rejoiced in the opportune arrival of Malik Suhrab, and assigned to him the country from the fort of Karor to Dinkot. "On this becoming known, many Biluches came from Kech Mekran to the service of the Sultan. The lands, cultivated and waste, along the banks of the Indus were assigned to the Biluches, and the royal revenue began to increase. The old inhabitants of Dera Ghazi Khan and Multan relate that after Suhrab's arrival, Haji Khan, with his son Ghazi Khan and many of their kindred and tribe, came from Kech Mekran to enter the service of the Sultan. When the tracts along the Indus were in the hands of Malik Suhrab and Haji Khan, Malik Suhrab founded a Dera named after Ismail Khan, and Haji Khan another, with the name of Ghazi Khan." This account is confirmed, though in less detail, by the historian *Ferishta*.

Submission of the Derajat chiefs to Sher Shah, A. D. 1540.

We next hear of these chiefs in A. D. 1540. In that year the Emperor Sher Shah visited Khushab and Bhera in the Shahpur District, and made arrangements for bringing into submission the south-western portions of the Punjab. Among other chiefs, who then appeared and tendered their submission, were Ismail Khan, Ghazi Khan, and Fatih Khan, Dodai Biluches. These were probably descendants of the men mentioned in the former reference, it being the custom in these families to have a common name, by which the ruling chief for the time being was always known. Thus the Hot chiefs of Dera Ismail were always

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The southern portion of the district—The Dodais and Hots.

called Ismail Khans, while the Mirranis of Dera Ghazi were called Ghazi Khans and Haji Khans. The Biluches are spoken of in the accounts of that time as a barbarous and daring tribe, that had long been settled in great numbers in the lower Punjab. Mr. Fryer, in his Settlement Report of the Dera Ghazi Khan District, mentions that the first Ghazi Khan is proved by the date on his tomb to have died in A. D. 1494. This would agree with the date in the manuscript quoted above, and would fix the latter half of the fifteenth century as the period when the main Biluch immigration took place. It would also allow sufficient time for the Biluch headmen to have become recognised chiefs of the country by the time of Sher Shah's visit to Khushab in A. D. 1540. The history of these Biluch settlements is involved in a good deal of doubt and confusion, caused in a great measure by the common custom of the local historians of assigning the founding of the principal towns and villages to the chiefs of the early settlers or their sons, from whom they are supposed to be named.

Main facts to be gathered from the early histories.

The main facts established appear to be that the early settlers were grouped under two leading families, the Ismail Khans and Ghazi Khans. Both of these were probably of one stock, *viz.*, Dodai Biluches; but this name Dodai disappears altogether, and in local history Ghazi Khan's tribe are known as Mirrani Biluches and Ismail Khan's as Hot Biluches. The Dodais are, according to the Biluches, a mixed tribe of Jat origin' belonging to the Satha-Sumra clan, now represented by the Sumr of Leiah. Doda, their founder, married a Biluch wife. This tribe owned Dera Ghazi Khan before the Biluch irruption, and retained it, being assimilated by the Biluches. The Mirranis of Dera Ghazi Khan were Dodais, the Hots on the contrary were Biluches of pure blood. The Hots according to Biluch tradition are one of the five main branches into which the Biluches originally divided, *i.e.*, Rind, Lashari, Hot, Korai and Jatoi, who took their names from the four sons and the daughter of Mir Jalalan, the common ancestor. They could scarcely therefore be a branch of the Dodai. The Governor of Multan seems to have assigned to these two families the lands along the Indus, including both banks, from its junction with the Chenab upwards. They first established themselves on the right bank, but by degrees threw out parties who took possession of the eastern bank as well. The Kulachi chiefs of Dera Fatih Khan held an inferior position to the Hots and the Mirranis, and, though perhaps at first independent, were brought into subjection by Hot chiefs at some period before the commencement of the 18th century. The head-

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quarters of the Hot Biluches were first fixed at Babar, a village on the Indus twenty miles south of Dera Ismail Khan. They afterwards founded Dera Ismail Khan. The ruling chief of this family always took the title of Ismail Khan. At the height of their power, they held the Makkalwad from the boundary of Sanghar to the Khasor hills. They do not appear to have exercised any authority over the Pathan tribes of the western Daman. The Hots also ruled over Darya Khan and the northern portion of Bhakkar Tahsil, where a grain measure, known as the Hotwala *topa*, is still used instead of the Bhakkar *topa*, which is the common measure in the country formerly ruled by the Jaskanis. Very little is known about these Hot chiefs. They ruled continuously at Dera Ismail Khan from their first settlement till about A. D. 1770, when the last of them, Nusrat Khan, was deposed by the King Ahmad Shah, and taken as a prisoner to Kabul. During the period of their ascendancy, the Hots were engaged in constant petty wars with the Gandapurs and other Pathan tribes of the border. Nur Muhammad, Kalhora, is also said to have had a war with the Hots shortly before Nadir Shah's invasion (A. D. 1738), in the course of which he marched into their country as far as Babar. Now and again the armies of Nadir Shah and the Durrani king swept through the Derajat, but they interfered but little with the internal government of the country. After the deposition of Nusrat Khan, Dera Ismail Khan was ruled for 20 years by Governors appointed direct from Kabul. In A. D. 1791, Nusrat Khan was released from imprisonment, and given a *sanad* conferring on him afresh the government of Dera Ismail Khan. He was in possession, however, for but a short time. In 1794 A. D. the government of the province was transferred to Muhammad Khan Saddozai; Nusrat Khan had in consequence to quit Dera. He took care, however, to carry off with him a rich merchant, from whom he afterwards exacted a heavy ransom. This was his last public act. The Hots now disappear from history. Nusrat Khan returned, it is true, and settled near Bilot; but he possessed no property, and a small pension, granted to the family by the Saddozai Nawabs, was stopped on the death of Nawab Sher Mohammad in 1855.

The last Hot deposed in A. D. 1770.

Subsequent history of the family.

The rise of the Jaskanis.

The Ghazi Khans held the Leiah province as part of the Ghazi territory, much as the Hots of Dera held Darya Khan, neither of them having their head-quarters in the cis-Indus tahsils. It was under these circumstances that the Jaskanis rose to power. At the beginning of the 17th century, under Biluch Khan, their chief, they established their independence from the Mirranis of Dera Ghazi, whose hold on the Leiah province was then lost.

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Rise of the Jaskanis—The leading Jaskani clans.

The leading Biluch tribes of the Bhakkar, as of the Leiah Tahsil, all claim descent from Biluch Khan. These include the Jaskanis, Mandranis, Mamdanis, Kandanis, and Sarganis. Biluch Khan was succeeded by Jasak Khan, Bhakkar Khan, Langar Khan and other chiefs of his family, whose deeds are much exaggerated by local tradition.

Extent of the Jaskani territory. They come into contact with the Sikhs.

At the beginning of the 17th century, the Jaskanis ruled over Bhakkar and Leiah and across the Thal to the Chenab side. They came occasionally into contact with the Sikhs who were then becoming a power in the Punjab. Biluch Khan, the Blind, one of the most famous of these Jaskanis, is said to have been killed in A. D. 1746 in a fight with Jhanda Singh and Ganda Singh, the Sikh leaders. It is probable that the real date of this event was somewhat later, and that this is the same Jhanda Singh who took Multan in A. D. 1772. In Cunningham's History of the Sikhs it is mentioned that from 1772 A. D. to the retaking of Multan by the Kabul King, the Bhangi Sikhs were predominant in all the southern Punjab, and that "they seem to have possessed Mankera as well as Multan, and to have levied exactions from Kalabagh downwards." Local tradition is against Mankera having been occupied by the Sikhs before its final capture by Ranjit Singh, and any expedition made by them in this direction can have been little more than a transitory raid.*

Fateh Khan Jaskani, 1746-1770.

Fateh Khan succeeded his father, Biluch Khan, the Blind. Towards the end of his rule, Nusrat Khan, Hot, of Dera Ismail Khan, crossed over to Bhakkar, and defeated Fateh Khan's son, Nusrat, whom he took prisoner with him to Dera. Hasan Khan, Laskrani, who was Wazir to Fateh Khan, was ordered on this to attack Dera, but he made excuses; and an attempt of Nusrat Jaskani's mother to obtain his release led to her attempted violation by Nusrat Khan, Hot. Nusrat, Jaskani, was after this released, but both he and his father Fateh Khan poisoned themselves through shame at the disgrace. The whole affair was a great scandal; and as Nusrat Khan, Hot, bore a bad character as a tyrant and winebibber, the King, Ahmed Shah, who was desirous of tightening his hold over these semi-independent provinces, took advantage of the excuse to deprive him of his government, and to remove him as a prisoner to Kabul. Meanwhile Hasan Khan, Laskrani, ruled the cis-Indus country in the name of Hayat

Wazir Hassan Khan, Laskarani, 1770-1779.

*The history of these times is wrapped in much obscurity, and the accounts being based only on tradition are often contradictory. One account makes out that Biluch Khan's branch of the Jaskani family, having been ousted from Bhakkar, called in the Sikhs. A Sikh force accordingly entered the country *viâ* Kalur Kot, and replaced Biluch Khan as ruler. This account declares that Biluch Khan died a natural death, and not in battle with the Sikhs at all. There are two palm trees at Bhakkar, named Jhanda Singh and Ganda Singh, and it is probable that these chiefs may have passed through with their forces in the course of some raid.

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The rise of the Jaskins.

Khan, the grandson of the former chief, Fateh Khan. Being desirous, however, to keep the Government in his own hands, he continued to keep Hayat Khan under close surveillance in the fort of Mankera, even after the latter had attained his majority. Hayat Khan eventually managed to escape, and getting together a party, he defeated Hasan Khan, and took him prisoner. Hasan Khan was soon afterwards murdered by some of Hayat Khan's attendants, who were opposed to him. The Government of the Jaskanis, however, was now fast breaking up. The Sarganis, who were then a strong tribe and had been much pampered by Hayat Khan, took offence at an expedition fitted out by Hayat Khan against one Gul Muhammad of Uch, a holy individual, who had been trying to establish his independence in the Chenab country. They accordingly attacked him treacherously, and murdered him in his fort of Mankera. This was in A. D. 1787. After this the Sarganis, under their chief, Gola Khan, held out for some time against Muhammad Khan, the brother and successor of the deceased Hayat Khan. They were eventually defeated by the Jaskani party under the leadership of Diwan Ladda Ram, and their chief Gola having been killed in this action, the Sarganis came to terms with Muhammad Khan, and were bought off with the Munda-Shergarh country, which was granted to them in *jagir*.

Hayat Khan, Jaskani, 1779-1887.

Muhammad Khan, Jaskani, 1887-1789.

The overthrow of the Jaskanis was eventually compassed in 1789 by the Serais under Abdul Nabbi.

The Serais of Karhoras.

These Serais were the same as the Kalhoras, who had been ousted from Sindh in 1772. They had waged a long conflict with the Kabul kings for the overlordship of the Dera Ghazi Khan country, where the Mirranis under Wazir Mahmud Khan had played a double game, sometimes on one side, sometimes on the other.

Nur Muhammad, one of the Kalhora princes, had fought with the Hots at Dera Ismail Khan, and it is not improbable that the Kalhoras had, for a time, prior to Nadir Shah's invasion, imposed their authority over the Jaskanis at Leiah. Over Dera Ghazi Khan they maintained a claim, in spite of the Kabul kings, until their own expulsion from Sindh at the hands of the Talpurs in 1772. This event threw them entirely into the hands of the Kabul king, and they retired with their following to the Dera Ghazi Khan District, where they were granted considerable *jagirs*. Henceforth they are known as Serais, instead of by their old name of Kalhoras. The Serais, finding themselves stranded at Dera Ghazi Khan with a large armed following, now commenced

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The Serais or Kalhoras.

to look about for some territory in which to found a new principality. The Jaskani country, torn by internal faction, and attached by old tradition to the province of Dera Ghazi Khan, was close at hand, and in every way suited for the purpose. Armed therefore with a *sanad* from Taimur Shah, Abdul Nabi, Serai, brother of Ghulam Shah, entered into a league with the turbulent Sarganis, and marched against Leiah. Muhammad Khan, Jaskani, was defeated and fled to the Tiwana country, and thence to Bahawalpur. The Nawab of Bahawalpur would probably have assisted him to recover his country, but Muhammad Khan, with the pride of a Biluch, insultingly refused to give the Nawab a valuable work on hawking for which he had asked, and ended his days as a dependent on Hasad Khan, the Nutkani Chief of Sagar. Thus ended the line of the Jaskani chiefs after a rule of more than 200 years.

Extinction of the Jaskanis as a ruling family.

Abdul Nabi Serai, 1879-1792. He is ousted by Nawab Muhammad Khan, Saddozai, in 1792.

Abdul Nabi, Serai, held the Leiah Government only for three years. Complaints were made to the King of his tyrannical rule, while an appointment was wanted for Muhammad Khan, Saddozai. This man was cousin to Muzaffar Khan, Nawab of Multan, for whom he had for some time acted as Governor of Multan, to the satisfaction of the King. A *sanad*, therefore, was soon drawn out, appointing Muhammad Khan Nawab and Governor of the Sindh-Sagar Doab from Kallur Kot to Mahmud Kot, and from the Indus to the Chenab. Muhammad Khan had still to take possession, which was not to be done without fighting. He was met by Abdul Nabi near Leiah, and in the battle that ensued, the Serais had at first the advantage, and the Nawab's people fled. Nawab Muhammad Khan himself was ready to fly, saying, "What can a King do without an army?" but was stopped by his *jemadar*, who said, "Better die than fly." Eventually, he rallied a part of his forces, and meanwhile some Labanas crept up through a *bhang* field and attacked the Serais from behind, and killed Muhammad Arif, the son of Abdul Nabi, who had been the soul of the fight, and the Serais being disheartened gave in. The Serais were allowed a day to remove their property, and departed by boat to their own country to the south.

Disturbed state of the cis-Indus Tahsils.

In the troubled times before the arrival of Nawab Muhammad Khan the leading men all over the country were setting up as independent chiefs. These were gradually brought into subjection by the Nawab, a work which in some cases was not accomplished without considerable diffculty. The Nawab also reduced the people of Wan Bhachran (in Mianwali) and afterwards attacked the Tiwanas under Malik Khan Muhammad, and defeated them, and looted Nurpur. The Nawab

did not, however, retain possession of the Tiwana country. This was the origin of the feud between the Multani Pathans and the Tiwanas. The celebrated Malik Fatteh Tiwana, who took so leading a part in the history of Dera Ismail Khan during the years immediately preceding annexation, was grandson of this Malik Khan Muhammad.

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Nawab Muhammad Khan, Saddozai, 1792-1815. Expedition against the Tiwanas. The Khasors reduced to subjection.

The Nawab also sent Diwan Manak Rai across the Indus against the Khasors, who had killed a holy Sayyid of Belot. The Khasors were eventually defeated, and the Nawab took their country and built a fort there.

Nawab Muhammad Khan seizes Prince Humayum in 1794.

Meanwhile Taimur Shah had died in 1793. He was succeeded by Zaman Shah, whose title was, however, disputed by Prince Humayun. In 1794, Humayun made his second attempt to recover the kingdom from Shah Zaman, but was defeated, and fled to Sagar where Massu Khan, Nutkani, chief of Sagar, assisted him and managed to smuggle him across the Dera Fateh Khan ferry. He got to Leiah, and stopped at a well, where curiosity was excited by his paying an *ashrafi* apiece for a few sticks of sugarcane that he had taken. The news came to the ears of Nawab Muhammad Khan, who happened to be at Leiah at the time. The Nawab suspected that it must be the prince Humayun, for whose capture strict orders, with promises of untold rewards, had been issued by Zaman Shah. He accordingly collected some horsemen and pursued Humayun, whom he caught up at a well in the Thal, some fifteen miles from Leiah. Humayun had some 20 or 30 horsemen with him, who in desperation made a good fight. The young prince, the son of Humayun, was killed, and Humayun was taken prisoner and brought into Leiah. The Nawab at once reported the capture of Humayun to the king Zaman Shah, who sent orders that Humayun's eyes should be put out, and his companions disembowelled. He also conferred on the Nawab the name of Sarbiland Khan, and the Government of Dera Ismail Khan, in addition to that which he already held. The orders of the king were carried out at Leiah. Among Humayun's attendants, who suffered, was a brother of Fatteh Khan, Barakzai. Humayun himself passed the rest of his life in confinement.

Attempts bring the Pathan clans into subjection.

The province of Dera, of which Muhammad Khan now became Governor, extended from the Khasor range to the Sagar country, ruled over by the Nutkani chief. The whole of the Makkalwad submitted at once to the new Nawab. Not so the tracts occupied by the Pathan clans. These tribes were bound to furnish the king with a body of horse, or a money commutation in lieu of service. The king also levied the *jazia*, or tax on Hindus,

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Nawab Muhammad Khan, Saddozai, 1792-1815.

through the whole Daman. Beyond the payment of this revenue the Pathan tribes were quite independent of the king and his local Governor. An attempt was made by Muhammad Khan to reduce the Mian Khels, and he took many of their villages and forced their Khan to fly; but the fugitive Khan went to his enemies the Gundapurs, and in spite of their internal jealousies, the tribes joined together under the lead of the great Sarwar Khan, and compelled the Nawab to abandon his design. As, however, the Durrani monarchy commenced to break up the power of Muhammad Khan gradually increased. At last, in A. D. 1813, he sent a large force, under Diwan Manak Rai, against the Gundapurs, and overthrew them at Maddi, and burned the town of Kulachi. A fine was put on the Gundapurs, and as they failed to pay it, they were deprived of all their eastern villages. Diwan Manak Rai afterwards proceeded to rectify the boundaries of the Mian Khels in a similar way, and before the death of Muhammad Khan his rule was to some extent established over all the Daman tract except Tank. His attempts against Tank were baffled by Sarwar Khan, who used to flood the surrounding country on his approach. Nawab Muhammad Khan had his head-quarters at Mankera and Bhakkar, and governed Dera by Deputy. In 1815 he died. He left no son, and was succeeded by his son-in-law, Hafiz Ahmed Khan.

Death of Nawab Muhammad Khan in 1815.

Succeeded by Nawab Hafiz Ahmed Khan, 1815-1825.

Muhammad Khan was undoubtedly a man of great character, and during his lifetime the Sikhs abstained from attacking the Leiah territories. Immediately on his death a demand for tribute was made on his successor, Hafiz Ahmed Khan. On his refusal his forts of Khangarh and Mahmud Kot were occupied by the Sikhs, and great atrocities were perpetrated on the Muhammadan population of the neighbourhood, till Hafiz Ahmed Khan procured the withdrawal of the Sikh garrison by the payment of a large sum of money, and thus recovered his forts, with part also of the plunder extorted. After this the Sikh Government continued to press the Nawab with all kinds of extortionate demands. Among other things Ranjit Singh was especially fond of seizing any valuable horses that he might hear of, and made the Nawab yield up some of his special favourites. In 18.8, Multan, in spite of the gallant resistance offered by Nawab Muzaffar Khan, had been taken by the Sikhs. Nawab Hafiz Ahmed Khan had not dared to assist his brother Nawab and kinsman in the struggle.

The Sikhs take Multan, 1818.

The Nawab of Mankera seizes Isa Khel and Mianwali, 1818.

Meanwhile in the general scramble for territory which commenced early in the last century among these quondam vassals but now independent princes, Nawab Hafiz Ahmed Khan managed to annex in 1818 Isa Khel, as well as part of the cis-Indus tract of Mianwali and his troops accompanied by a Rev-

enue Collector, Diwan Manak Rai, overran Marwat. But he was not left long to enjoy the fruits of his conquest. In the autumn of 1821 Ranjit Singh, disengaged from more serious matters, determined to reduce him. He accordingly marched with an army through Shahpur to a point on the Indus opposite Dera Ismail Khan. He sent a force of 8,000 men across the river, and on this the town was surrendered by the Governor, Diwan Manak Rai. Bhakkar, Leiah, Khangarh and Maujgarh were all successively reduced without resistance. Mankera, fortified by a mud wall, and having a citadel of bricks, but protected more by its position in the midst of a desert, was now the only stronghold remaining. A division was advanced for the investment of this place on the 18th November. Sardar Khan, Badozai, a bold impetuous man, recommended the Nawab to march out at once and attack the Sikhs. "To fight in the plain," said he "is the business of a lion, to hide in a hole that of a fox." The Nawab, however, was not to be persuaded, and preferred to stand a siege. The Sikhs now set *beldars* to dig *kacha* wells for the use of the troops, and in the meantime water had to be brought on camels and bullocks from Maujgarh. The wells were ready by 25th November and Ranjit Singh then moved to Mankera with his main force, and on the 26th November the investment was completed. The bombardment of the place continued for ten days after this, but not without loss to the besiegers. At last one of the minarets of the fort mosque having been broken by the Sikh fire, the Nawab looking on this as an unlucky omen, and thinking that enough had been done for honour, proposed terms, and agreed to surrender the fort on condition of being allowed to march out with his arms and property, and to retain the town and province of Dera, with a suitable *jagir*. Ranjit Singh granted the terms, and the place was surrendered accordingly. The Nawab was treated with great civility, and was sent with an escort to Dera. Ranjit Singh now annexed the cis-Indus tahsils and the Dera Fatteh Khan *ilaqua*. At the same time he enforced engagements for tribute on the chiefs of Tank and Sagar. The fort of Mankera was put in charge of a Governor, who held directly under the Sikh Government, and was never entrusted to the local *Kardars*.

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History.
Advent of the Sikhs.
Siege of Mankera, 1821.
Its surrender.
The Sikhs annex the Leiah province.

No sooner had the insatiable Ranjit Singh gained the Indus for a frontier, then he determined to advance it to the Suleiman Range itself. In 1823 he crossed the Indus at the head of a large force, marched through Isa Khel and Marwat without opposition, and pushed on to the outskirts of Bannu. But after staying a month or two, he retired without attempting to plant a garrison in the trans-Indus country.

Ranjit Singh marches through Isa Khel, 1823.

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Government of the Leiah province under the Sikhs.

Ranjit Singh now put Rattan Chand in charge of the land revenue of the annexed territories of Bhakkar and Leiah, and Rajkaur of the customs. These were suspended after two years, on account of their bad management and oppression. Narayan Das, Gurwara, whose family still resides at Mankera, was then appointed in their stead. In his time the Bhidwals refused to pay *tirni*, and at first defeated the Sikh forces sent against them, but were eventually defeated and heavily fined. The rule of Narayan Das was exceedingly oppressive, and on the people complaining to Ranjit Singh, General Ventura was appointed to examine Narayan Das' accounts. Narayan Das took poison, and his son Tej Bhan was squeezed, and made to pay up all defalcations with a fine. He was then appointed in the room of his father; but, being unable to pay the full assessment, was removed after a year. Nawab Abdul Samand, Badozai, *Jagirdar* of Dera Din Panah was then appointed Governor (A. D. 1828). He had a boundary dispute with Hasad Khan of Sagar, regarding some lands in the bed of the Indus. The Nawab's forces met those of Hasad Khan at Bet Balu, but in spite of the gallantry of their leader, Nasar Khan, Popalzai, of Docharkha, and of the Bhidwal horsemen, the rest of the Nawab's troops ran away, and Hasad Khan remained in possession of the disputed territory. Khoshal Singh, Khalsiah, was now deputed by Ranjit Singh to the assistance of Abdul Samand Khan. He came with his troops to Mankera, and promised to drive Hasad Khan out of Sagar, and to give his territory to Abdul Samand Khan for Rs. 25,000. Having been paid the money, he crossed over to Sagar, and got Hasad Khan to pay him Rs. 25,000 more to leave him alone. Having thus made Rs. 50,000 he returned to Lahore, and left Abdul Samand Khan and Hasad Khan to fight it out. All this fighting and bribery prevented Abdul Samand Khan from paying up his revenue (*ijara*); so he was sold up, and his Dera Din Panah *jagir* was confiscated. In A. D. 1831, Rajkaur was appointed *ijaradar*, and after him Khalsa Khazan Singh. Eventually in 1837,

It is made over to Sawan Mal 1837.

the whole of the cis-Indus country as far as Mianwali was made over to Sawan Mal, the Sikh Governor of Multan, in whose name it was successively governed by his son, Karm Narayan, and his grandson Wazir Chand. Sawan Mal was a wise and able Governor, far famed for the excellence of his revenue administration and for his general encouragement of agriculture. His name is still a household word in the cis-Indus tahsils. He died in 1845, and was succeeded by his son Mul Raj. Shortly after this, the second Sikh War broke out, and was followed by the annexation of the whole country by the English Government.

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Sikh domination in Isa Khel and Mianwali. Isa Khel.

The Isa Khel Tahsil continued subject to the Nawab of Dera until 1836 when it was formally incorporated in the Sikh Kingdom. But for the ten or twelve years subsequent to Ranjit Singh's expedition in 1823, the Nawab's sovereignty was more shadow than substance. From 1823 to 1845 Marwat and Bannu were every second or third year invaded by a large Sikh army, and in these expeditions the Sikhs used to march through Isa Khel whenever they required it as a highway, and treated the Nawab and his Government with scant courtesy.

The Mianwali Tahsil.

The connection of the Sikhs with the Mianwali Tahsil had commenced towards the close of the reign of Taimur Shah. Before his death in 1793, the Sikh troops had on several occasions overrun the greater part of Mianwali, and levied contributions and tribute from its villages, but it was not until after the fall of Mankera in 1822 that it was completely annexed and settled.

Sikh *jagirs* in the cis-Indus Tahsils.

It must not be imagined that under the Sikhs the whole cis-Indus territory formed one compact Government. A great portion of it was held in *jagir*. Each *jagirdar* possessed judicial and executive authority within the limits of his *jagir* and was quite independent of the Kardar to whom the *khalsa* portion of the district happened to be leased. These *jagirdars* were almost invariably non-residents, and put in agents, known as Hakims, to manage their estates. These Hakims were more or less in the habit of raiding on one another, and lifting cattle, and the country, till the time of Sawan Mal, was generally in a disturbed state. These *jagirs* were mostly in the Thal. Haidarabad, Khanpur, Dullewala, Nurpur were all held by different Sikh Sirdars. The Sindhanwala family held the Panchkota tract, so named from the five principal places which it included (Harnauli, Jandanwala, Piplan, Kalur and Darya Khan). The Panchkota *jagir* was resumed about A. D. 1844, and made over on *ijara* to Sawan Mal, and none of the large *jagirs* were continued after annexation. The whole of the cis-Indus *jagirs* granted by the Sikh Government, with the exception of one or two small villages, have now been resumed.

Outbreak of second Sikh War, 1848.

In 1847 Sir H. Edwardes, then Assistant Resident at Lahore, had been deputed to visit these parts. He was at Dera Fatteh Khan when in April 1848 he heard the news of the outbreak of the second Sikh war. He immediately crossed the river to Leiah, but retreated on the advance of a force sent by Diwan Mulraj. The next month passed in movements and counter-movements in the neighbourhood of Leiah. Meanwhile Edwardes had collected a mixed force made up mainly of Multani Pathans, and of men of the Gandapur, Ushtarana and other border tribes. On 21st

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Outbreak of second Sikh War, 1848.

Annexation of the Punjab, 1849.

May he heard of the occupation of Dera Ghazi Khan by a force that he had sent down the right bank of the Indus under Van Cortlandt. He then proceeded to move towards Multan. On his march he fought the battles of Kaneri and Sadduzam, in which his rough levies behaved with great gallantry. These same forces took part in the siege of Multan, under General Whish. On the taking of Multan, 22nd January 1849, the greater number were discharged, and returned to their homes. Two thousand, however, of Edwardes' levies were retained in Government employ, and the leading Sirdars all received handsome pensions.

On 29th March 1849 the Punjab was annexed, and the territories, now comprised in the Mianwali District, became formally a portion of the British Empire. In the organisation of the province that immediately followed, there were formed the districts of Leiah and Dera Ismail Khan.

The Isa Khel Tahsil, together with Marwat, was thrown into the Dera Ismail Khan District, while the cis-Indus tahsils (except a portion of the Mianwali District east of the Salt Range, which then was a part of the Jhelum District), were incorporated in the district of Leiah. From the time of annexation until the Mutiny of 1857 the history of the tract was uneventful.

The Mutiny.

The following account of the events of 1857 is taken from the Punjab Mutiny Report:—At the two stations of Bannu and Dera Ismail Khan, in this district, there were located 2 regiments of Punjab Infantry, 2 of Punjab Cavalry, 2 Punjab Batteries, 1 Sikh Infantry Regiment, 1 very weak Police Battalion, and 180 Police Horse. Many of these troops were instantly ordered away to Peshawar, Jhelum, &c., and for two days, until the arrival of the 3rd Sikh Infantry from Dera Ismail Khan, the station of Bannu was guarded only by a Battery of Punjab Artillery and the inhabitants of the country, "an experiment," says Captain Coxe, Deputy Commissioner, "which it might have been dangerous to protract." The rapid march of the troops caused a temporary panic amongst the traders of Bannu. Captain Coxe closed the gates and talked the people out of their fears. A fresh cause of anxiety was caused by the arrival of the suspected 39th Native Infantry from Jhelum. Captain Coxe felt their presence a source of imminent danger until 600 or 700 Multani horse had been raised and collected at Dera Ismail Khan. The 39th were quietly disarmed on the 14th July without the presence of other troops. Three days before this, Captain Renny, Commanding 3rd Sikh Infantry, informed the Deputy Commissioner of a plot among the Hindustanis of his regiment, 113 in number to murder all their officers. These 113 men were disarmed the

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The Mutiny.

same evening, and were subsequently dismissed the service. The plot could not be brought home to them, though there is little doubt it had been laid. Another conspiracy was reported amongst the 39th Native Infantry at Dera Ismail Khan with the object of seizing the fort. Timely information saved it. When the news of the mutiny at Mianwali of the portion of the 9th Irregular Cavalry reached Captain Coxe, he marched to the Indus with a party of Multani horse, and, travelling 60 miles in 17 hours, raised all the country to act against them if requisite, and sent Mr. Cowan, Extra Assistant Commissioner, to follow them up. His force, co-operating with Captain Hockin's party, was instrumental in effecting their destruction. The frontier tribes were turbulent during this period as is their wont, but the presence of a movable column sent by the Chief Commissioner restrained them from ravaging our territory.

The Leiah District remained very tranquil. Only one or two slight punishments were inflicted for offences connected with the mutiny. Much anxiety was caused at one time by the arrival of a wing of the 17th Irregular Cavalry under Captain Hockin, but it remained firm. When the Kharral insurrection broke out in September, Captain Hockin marched against the rebels, leaving at Leiah 40 of his men who had fallen under suspicion. The day before he marched news reached Leiah that the whole of the 9th Irregular Cavalry had mutinied at Mianwali. Captain Fendall says :—" I certainly at first thought it was a deep-laid scheme for raising the whole country, that the 9th Irregular Cavalry were to appear before Dera Ismail Khan, be joined by the 39th Native Infantry, come on to Leiah, pick up the wing of the 17th Light Cavalry, go towards Gugera, coalescing with the tribes, and march on to Multan (where there were two suspected regiments of Native Infantry). It was feasible, and would have temporarily lost us the lower Punjab." But this dreaded junction did not take place. The news proved to be an exaggeration. The mutineers of the 9th Irregular Cavalry, who, strange to say, were all men of the cis-Sutlej States were only 30 in number, and were entirely destroyed in a desperate fight in which Mr. Thomson, the Extra Assistant of Leiah, was very dangerously wounded. His gallant conduct in this most spirited little battle was conspicuous.

Subsequent changes of boundaries.

The Bhakkar Tahsil until 1860 was known by the name of Darya Khan, its former head-quarters station. At annexation the tract now comprised in it was divided between the old Mankera and Darya Khan Tahsils. In 1853-54 the Mankera Tahsil was abolished, the Khushab *taluqua* being transferred to Shahpur; the Chaubara, Nawankot and Maujgarh *taluquas* to Leiah; and the remainder of the tahsil being incorporated in

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Darya Khan. The *taluqua* of Piplan and Harnauli belonging to the old Darya Khan Tahsil were at the same time transferred to Mianwali, then known as the Kachhi Tahsil. The Mitha Tiwana and Nurpur *taluquas*, which were afterwards transferred to Shahpur, belonged to the Mianwali, and not to the Bhakkar Tahsil. A few villages of the Dera Tahsil, lying on the left bank of the Indus, were transferred to Bhakkar in 1857. These villages were 19 in number, and form a fringe along the Indus from Gishkori to Bet Bogha. The Bhakkar Tahsil, as finally arranged, contained the following *taluquas* :—Kalur, Darya Khan, Nawabpur (Kanjan), Kotla, Bhakkar, China, Chung (Shekhani), Notak, Behal, Pir Ashab, Khanpur, Jandanwala, Dullewala, Mankera and Haidarabad.

On 1st January 1861 Leiah District was abolished, and the Derajat Division was formed with Bannu for its most northern district. The trans-Indus tahsils of Bannu, Marwat and Isa Khel, which had previously belonged to the Dera Ismail Khan District, with its head-quarters at Edwardesabad, together with the cis-Indus Tahsil of Mianwali, which had formed a sub-division of the Leiah District, were now constituted into the new Bannu District. The tract called Pakhar or Khudri, which lies east of the Salt Range, was in 1862 transferred from the Jhelum District to Mianwali, while eighteen villages of the Nurpur *ilaqa* were transferred from Mianwali to Shahpur. The Mianwali and Isa Khel Tahsils were formed into a sub-division with its head-quarters at Mianwali. The Leiah and Bhakkar Tahsils were on the other hand thrown into the new Dera Ismail Khan District, of which they formed a sub-division.

On the separation of the North-West Frontier Province from the Punjab a further reconstitution took place, and on 9th November 1901 the Mianwali District was formed out of the four tahsils of Isa Khel, Mianwali, Bhakkar and Leiah, the two former being taken from Bannu, and the two latter from Dera Ismail Khan District.

The head-quarters were fixed at Mianwali, the Bhakkar sub-division was maintained, and the district was included in the Multan Division.

From 1st April 1909 the Leiah Tahsil was transferred to the Muzaffargarh District, and the district of Mianwali, consisting now of three tahsils only, was attached to the Rawalpindi Division.

Since the Mutiny the history of the district has been uneventful, with the exception of occasional armed dakaities of a serious character organised by marauders from outside the district.

In prosperity the district has steadily developed.

Section C.—Population.

CHAP. I-C. Population. Density and distribution.

The Mianwali District is the most sparsely populated district of the Province with a density of 64 persons only per square mile. The large hill area which the district includes, the vast expanse of Thal, and the large proportion of unculturable land in the bed of the Indus account for this result.

Table No. 6 of Part B gives statistics for each tahsil and for the whole district showing the distribution of population between towns and villages.

The subjoined table compares the population in 1911 of each tahsil with that of 1901:—

——	1901.	1911.	Variation, per cent.
Mianwali ...	119,074	138,380	+16·2
Bhakkar ...	118,612	135,127	+13·9
Isa Khel ...	64,224	67,870	+5·7
Total ...	301,910	341,377	+13·1

Of the three tahsils the density per square mile is greatest in Isa Khel (95), in Mianwali it is 90, and in Bhakkar 43 only, the latter tahsil having the greatest proportion of desert Thal.

The most thickly populated tract in the district is that which lies immediately above and below the high banks of the Indus.

Towns and villages.

Table No. 7 gives details of the urban population. The district contains four towns and 396 villages.

The four towns are Mianwali, Isa Khel, Kalabagh and Bhakkar, this being the order in which they rank according to population.

Of these, Bhakkar has grown very little in the last twenty years, while Isa Khel and Kalabagh have diminished.

Character of villages.

The formation of villages varies in different parts of the district.

In the mountainous tract of Bhangi Khel there is no central village, each bit of land or *tappa* having a cluster of huts, the size of the hamlet being proportionate to the amount of cultivation

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Population.

Character of villages.

in the neighbourhood. The whole country is indeed dotted with solitary houses built alongside the cultivated fields.

In the rough country called Khudri, east of the Salt Range, the villages are strong collections of houses, built generally on an elevation, either on the bank of some stream, which supplies water throughout the year, or near some depression, which can be embanked for the storage of rain water. Wells are generally sunk in the environs of the village.

The older village sites seem to have been selected with reference to their natural strength in warfare, but outlying hamlets called *wandhas* or *dhoks* are now common in the flat country for the convenience of those whose lands are distant from the parent village.

In the hill encircled plain of the Mianwali and Isa Khel Tahsils the villages are generally large groups of houses, built either at the foot of the hills, or near the river bank, the water-supply being the main determining factor in the selection of the site. In the hillside villages perennial streamlets and springs, and in the riverside villages, wells supply the drinking water. Security of life and property and extension of cultivation have, however, encouraged the development of numerous outlying hamlets or *wandhas* in the space intervening between the river and the hills. These, however, have to depend mainly on rain water collected in ponds. Large ponds are a prominent feature of all villages and hamlets removed from the river. In the Kachhi or riverain tract there are no strong villages towards the extreme north, owing to the destructive nature of the river floods. In this tract, as well as in the heart of the Kachhi throughout its length, the habitations consist of clusters of thatched huts, but from Silwan southwards in the more protected area, which immediately borders the eastern high bank, the villages are larger and built of mud for the most part, though thatch is also largely used even here. In villages that are not situated in the actual bed of the river, the favourite position is just above the high bank as near to its edge as possible. In the Bhakkar Tahsil, some of the largest villages are thus situated.

In the Thal proper there are a few large *abadis* of old standing, but every well in the village area is a little hamlet, containing one or more houses according to requirements, as it is not possible to work a well day and night without a certain number of men permanently residing there. In most villages the main *abadi*, from which the village is named, is merely the largest hamlet out of many.

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Population.

Grouping of houses in towns and villages.

The towns generally have only one main bazar running through the centre. The mosques, *dharmsalas*, and temples are generally built in prominent places. The dwelling houses open either into lanes or into open spaces connected by lanes with the principal thoroughfares. The town of Bhakkar is encircled by a wall, but has of recent years shown a tendency to overflow this circumscribing limit. The town of Kalabagh has a picturesque situation. The houses are built against the side of an almost precipitous hill, and are piled one upon another in successive tiers, the roof of one tier forming the street giving access to the next. Above a cliff overhangs the town and immediately below it the Indus flows.

The villages of the district are for the most part built without system, but grow at haphazard as occasion requires. In the majority of cases space is no object. The few shops of the village are usually arranged in the largest and most central lane. The shopkeeper usually sells supplies of all kinds, including cloth, as well as being the village banker. The number of shops in a village is an index of its prosperity. Every village has one or more mosques with a large platform attached to it. Some of the larger villages also contain *hujras* or rooms intended for the use of travellers, and in smaller villages there are similar rooms attached to the mosques and used for this purpose.

Growth of population.

During the last four censuses there has been a steady growth in the population of the district, as set forth in the following table :—

Year.	Population.	Increase, per cent.
1881	262,266	...
1891	287,026	9·4
1901	301,910	5·2
1911	341,377	13·1

During the census of 1891 large gangs of labourers, employed on the construction of the Mari-Attock Railway, were included in the district figures, while in 1901 the enumeration coincided with a period, when a failure of the rains in the preceding year had temporarily driven many persons to migrate from Isa Khel to Marwat. The increase in population per cent. between 1881 and 1911 was 30·1.

CHAP.I-C.

Population

Migration.

Table No. 8 gives the principal statistics of migration in and out of the district during the past four decades.

Most of the migration consists in the interchange of persons with the districts immediately neighbouring, especially with Shahpur, Attock, Kohat and Dera Ismail Khan.

Other than these changes, the only noteworthy figures of the 1911 census show that the district then contained 1,400 persons born in Afghanistan, and that of persons born in the Mianwali District there were as many as 4,987 residing in the district of Lyallpur. The latter figure is of course due to emigration to the Lower Chenab Canal Colony. Out of the population of 341,377, enumerated in the district in 1911, it was found that 13,662 persons or four per cent. had been born outside the district, while 16,293 persons born in the Mianwali District were at the time of the census found residing elsewhere in the Punjab.

The interchange with neighbouring districts is the result of inter-marriages and the fact that the boundaries of the district are not for the most part co-extensive with the areas settled by its leading tribes.

The immigrants from Afghanistan above mentioned are mainly Powindah graziers, who frequent all parts of the district, but especially the Thal, in the winter months.

Age statistics.

Table 10 gives the figures for age, sex, and civil condition.

As regards age, the statistics are affected by several considerations, such as the vague ideas which the people entertain as to their real age, and the common habit of preferring certain numbers to others in stating their ages. For instance, thirty-two is a very favourite age for a man to describe himself, and it is often made to do duty for the age of persons varying between twenty-five and forty: similarly eighty years is a not uncommon synonym for old age generally.

The following figures show the distribution by age of every 1,000 of the population :—

	0—5	5—10	10 - 15	15—20	20 40	40 60	60 and over.
Persons	154	163	112	68	286	160	57
Males	148	164	122	71	276	160	59
Females	160	162	102	65	296	160	55

The number of persons crossing the limits of sixty years is

comparatively small: one sees few old people in the villages. This may be partly due to great variation between the excessive heat of the summer and the severe cold of the winter, which must tell upon persons of advancing years.

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Table No. 11 gives the birth and death rate for each year. Since 1901 the birth rate has exceeded the death rate in two years only, namely 1908 and 1911.

There is no doubt that the registration of deaths is likely to be more accurate than that of births.

The following statements show the annual birth and death rates from 1901 to 1910 compared in each case with the average for the province:—

Birth rate.

Year	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
District	36·	42·	42·1	42·1	46·2	44·9	39·	44·5	39·7	48·9
Province	35·	44·	42·	42·	44·	44·	40·	42·	35·	42·

Death rate.

Year	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
District	45·6	54·1	66·2	53·9	57·9	77·5	67·6	40·2	58·3	68·5
Province	35·	44·	49·	49·	47·	36·	61·	50·	31·	33·

The average birth rate for the ten years was 42·5 *per mille*, as compared with the average of 40·8 for the whole province. The average death rate has been 59 *per mille*, as against the provincial average during the same period of 43·6

The system of registration of vital statistics is discussed at length in Chapter II, Part I, paragraph 72 of the Provincial Census Report of 1911. There are no peculiar features pertaining to this district.

Diseases.

Table No. 11 shows the actual number of deaths annually from cholera, fever, small-pox and plague. From plague the district is tolerably immune. Fever, however, especially in the Kachhi or riverain tract, claims a large toll of victims, the neighbourhood of the Indus being malarious, and this being at the same time the most densely populated portion of the district. The years 1903 and from 1906 to 1908 were those in which the mortality from fever was highest. Of other diseases goitre is not uncommon in the vicinity of Kalabagh, and guinea-worm or *narwa* is very rife in the uplands of the two northern tahsils, where pond water has to be used a great deal

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for drinking and bathing purposes. When rain holds off, the water in these ponds stagnates, and the admission of cattle into the tanks accelerates the breeding of the guinea-worm, which is wont to attack the skin externally. Hence the hot weather after July is the season when the disease is most prevalent. It is usually the legs which are attacked; the affected part swells and, unless the swelling bursts and the worm is gradually extracted, the disease results in the shrivelling of the limb and sometimes ends fatally. Small-pox prevails occasionally during the spring, while cholera is sometimes imported from elsewhere.

Skin and eye diseases are fairly prevalent, and are in some measure attributable to the frequent sandstorms.

The measures taken to cope with fever consist mainly in the distribution of quinine through the agency of zaildars and village headmen. A great deal of the fever is, no doubt, really pneumonia and, as already mentioned, arises from the malarious character of the Indus bed, into which the *zamindars* are obliged by their pursuits to penetrate in the early morning hours to carry on the work of cultivation passing thither from the comparatively dry atmosphere of their villages, which are situated above the high bank.

The district is not liable to famine and deaths from this cause do not occur. Want of water, combined with heatstroke, is, however, a not uncommon cause of death to unwary travellers in the Thal during the hotter months.

Infant mortality.

Infant mortality is somewhat below the normal for the province. The neglect of female infants, which has been pronounced to be an important contributory cause of infant mortality in some parts of the province, is not prevalent in this district, owing to the fact that marriageable girls are scarce and consequently valuable.

Birth customs.

The Muhammadans observe the following customs in connection with births. At the time of a woman's confinement, a sheep is slaughtered and the mutton is given away in charity after the delivery. *Gur* is distributed if the baby happens to be a boy. The midwife, who cuts the *nara* (umbilical cord), is paid a rupee if the baby is a boy and eight annas if a girl. After the baby is washed and wrapped in clean clothing, the priest or *mullan* whispers *Allah Akbar* into its ears, and receives some flour and money by way of charity. The baby is next given a name by the *Pir*, or by one of the elders of the brotherhood, being generally called after one of the ancestors, or after some favourite well or other object. The next step is to give a proper shape to the baby's

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limbs. The legs are straightened, the nose is pulled out and pressed on both sides, to give it an aquiline appearance, the ears are pressed against the head, and the forehead is pressed and patted with the palm of the hand, to make it smooth and broad. Ugly projections at the back of the head are pressed, and the chest is flattened out. To effect the flattening of the head at the back, resort is also had to a peculiar device. Three sticks are fixed upright in a small slab of clay, at short distances, in the form of an equilateral triangle. Whenever the baby is put on the ground or in a cot, this slab, called *durhana,* is placed under its head as it lies face upwards. A cloth is placed over the face to keep off flies. The hard slab keeps pressing the back of the head up, while the sticks serve the double purpose of keeping the head in position and preventing the contact of the cloth with the face. Sometimes a cloth cushion, called *sinhun,* is placed between the slab and the head.

The shaping of the head, nose and ears goes on for five or six months and any defect in the beauty of the head or face is attributed to the stupidity of the mother, who is taunted for it.

A knife is always kept near a baby, in order to repel evil spirits.

On the seventh day after birth, the baby's head is shaved, called *jhand lahawan*; the barber holds a cup over the baby's head, and all the relatives present throw in a pice each. The barber takes the proceeds. An earthen tray (*sanak*) is then placed in front of the baby and the shaved hair is thrown into it, together with a rupee, which the barber also takes. This is called *takht.*

On the first Friday after birth, a sheep is slaughtered and the mutton is distributed to the poor. This custom is called *haqiqa.* Immediately after a birth, the midwife goes round congratulating the neighbours and relatives, and collecting small contributions from each. The barber and *mirasi* visit those relatives who live at some distance and receive similar rewards. The mother is fed after child-birth on *halwa* (sweets) made of sugar, flour, *ghi,* and cummin (*zira safed*). The dish is supposed to be nutritive and invigorating, and the cummin is calculated to increase the milk.

The Hindus follow the same customs, with the exception that no sheep are slaughtered, and the christening ceremony is performed by a Brahmin. The *jhand* ceremony is not performed among the Hindus until the boy is one to five years' old, and the head of a girl is not shaved at all. Dakhna Aroras, however,

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have a custom of their own, which is performed on the sixth day and called *sathi*. All members of the brotherhood visit the baby's father in the evening to congratulate him, taking with them presents of sugar. The father distributes *gur* or *ghunganies* (wheat cooked in sugar). The Brahman brings the horoscope of the baby, which he has prepared and does *Ganesh puja* (worship of Ganesh). A bow and seven arrows are then hung on the roof of the room, in which the delivery has taken place.

Sex statistics.

The birth and death rates of sexes are given in Table 11. In the matter of births males preponderate, while the mortality among women is greater than among men. Hence there is a distinct disproportion between the sexes.

The following table shows the extent to which this disproportion has varied during the past four censuses, and compares the district figures with those for the whole province :—

Number of females to 1,000 males.	Year 1881.	Year 1891.	Year 1901.	Year 1911.
District ...	886	897	912	897
Province ...	844	850	854	817

The district proportion, it may be noted, like the provincial proportion, rose gradually between 1881 and 1901, but fell between 1901 and 1911. The fall in the last decade was not, however, so marked as in the provincial figures.

Civil condition.

The statistics of civil condition are given in Table 10 of Part B. The number of married persons in 1911 was 40·2 per cent. of the total population, and this percentage has remained practically constant during the last four censuses. Indeed, the proportion of married persons to others is almost the same in the case of each of the principal religions of the district.

The following accounts of the customs and ceremonies connected with betrothal and marriage, restrictions as to marriage, polygamy, divorce, and abduction are taken from the Customary Law of the Mianwali District by Rai Bahadur Pandit Hari Kishan, Kaul, C.I.E. :—

"*All Musalmans except Sayyads*—

Betrothal.

"The contract of betrothal is made by the father of the girl, and, in his absence, by the grandfather or brother; and if there are more brothers than one then by the oldest brother. If the father had two wives, the full brother of the

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girl has the preferential right and the father's brother takes preference over the mother. If the girl has no full brother, then the mother and the half-brother, if any, can arrange the betrothal. In the absence of father, brother and father's brother, the mother can enter into a contract of betrothal, but she cannot give the daughter out of the tribe. After the mother, the legal heir, whoever he may be, can give the consent. An adult male can consent to his own betrothal, but ordinarily his father acts on his behalf. In no case, however, can a female, whether a minor or an adult, enter into a contract of betrothal on her own behalf. In the absence of father, mother and other legal heirs, a female can consent to her own betrothal in her own tribe (or in the case of Awans in a higher tribe). The consent of the father, male agnate, or the mother, as the case may be, is necessary to the validity of betrothal except in the case of betrothal of an adult.

" Sayyads follow the Muhammadan Law, that is, a daughter, when an adult, can enter into a contract of her own betrothal even in the presence of the parents.

" *Hindus* –

" The contract is made in the first instance by the father of the boy or girl, and in his absence by the legal guardian of each party. An adult male can enter into a contract of betrothal on his own behalf. But a female, whether a minor or an adult, cannot. The consent of the father or legal guardian is necessary for the validity of a betrothal except in the case of a betrothal of an adult male.

" NOTE.—The consent of the mother, if alive, is taken generally in every case, but her refusal to give consent carries no weight against the wishes of the father, the male agnate or the legal guardian. There is a lack of women all over the district, and girls are generally looked upon as valuable goods. Large sums have generally to be paid as consideration for the grant of the hand of a girl, but even where this is not done, the right of giving away a girl is jealously guarded and vigorously enforced. Disputes are not uncommon regarding betrothal of a girl, the mother wishing to give her to one man and the brother or agnates to another. Betrothals made contrary to the wishes of strong agnates generally lead to litigation and often to violence. The custom that a girl has no say in the matter of her betrothal, though generally recognised, is often departed from in the case of girls of age. The Jats have quoted several instances of elopement of adult girls followed by marriage contrary to the wishes of the parents, the marriage being subsequently recognised by the court or community. Among a section of Pathans, *viz.*, Khataks, elopement is largely recognised as a preliminary to marriage, which is afterwards recognised by the relatives.

" *All Mussalmans except Khatak Pathans*—

Formalities connected with betrothal.

" The general custom is for the boy's guardian or some relatives or friends to go to the girl's house taking a certain number of clothes and ornaments for the girl and some sweets and *menhdi*. They are received by the girl's guardians and relatives and betrothal is formally arranged. The clothes and ornaments, if any, are presented for being made over to the girl, and a blessing (*dua khair*) invoked. Nothing is usually given by the girl's side in token of acceptance of the offer, except among Pathans who present the boy's mother (if she accompanies the party) with some sort of a cloth. Sweets and *menhdi* are then distributed and the betrothal is considered complete. The Awans consider the saying of *dua khair* alone as sufficient for completion of the betrothal, but the other tribes insist upon the observance of the above-mentioned formalities with slight differences before a betrothal can be considered complete. The contract is considered revocable any time before the *nikah* (marriage). Before the completion of a betrothal in the above-mentioned manner, the contract can be revoked without any claim to damages, but after

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the completion of a betrothal it is considered undesirable to rescind the contract. If the boy's side back out of the arrangement, they cannot recover from the girl's side the clothes and ornaments presented to the girl. On the other hand, if the girl's side refuse to adhere to the alliance, they are bound to return the clothes and ornaments received by them from the other side, and are also liable for damages, except among the Isa Khel Khans, Pathans of Musa Khel, Chidru and Sultan Khel and the Awans.

" *Khatak Pathans*—

" Among the Bhangi Khels and other Khatak Pathans, the betrothal is not distinct from ***nikah***, both ceremonies being performed on the same day. The alliance is first arranged by the parties, and when the offer of marriage has been accepted by the girl's guardians, the boy's guardian or nearest relative goes to the girl's house together with the boy (bridegroom) and some respectable persons, taking a sheep, some flour, etc., with him. Food is cooked at the girl's house. Half the money previously agreed upon is paid and *nikah* (marriage ceremony) performed. The guardian of the girl may or may not give part of this money to the girl in the form of ornaments. The contract is completed on the performance of ***nikah*** and cannot be revoked.

" *All Hindus except Labanas*—

" There are three classes of betrothal : —

(1) The ***Dharam*** betrothal where no consideration is taken in return for the gift of a girl ;

(2) *Watta Satta*, where a girl is promised in return for a girl promised to be married into the family ; and

(3) On payment of money (*takke*), where a cash payment is made in return for the gift of a girl.

" In each case the first preliminary is a request for betrothal by the father or guardian of the boy to the father or guardian of the girl.

" When the father or guardian of the girl gives his consent and when it has been settled under which of the above-mentioned classes the contract will fall, the following further formalities are observed :—

" CLASS I.—*Dharam* betrothal—

" A number of relatives of the boy go to the house of the girl (taking nothing with them). The girl's father or guardian meets them with his relatives and gives them some sugar, and the Brahman, if present, does *Ganesh Sthapan* (worships the god Ganesh) and reads *Gotrachar*. The sugar is taken by the boy's relatives to the boy's house and distributed there.

" CLASS II.—*Watta Satta*—

" There are three kinds of *Watta Satta*—

(*a*) *Amho Samhane*, where each party betroths his girl to a boy in the other party's family.

(*b*) *Trebhanj*, where three betrothals are made in connection with one another.

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(c) *Chôbhanj*, where four betrothals are made in connection with one another.

"In this class of betrothal (*i. e.*, *Watta Satta*) all the parties concerned meet at one place by appointment and enter into the contract of giving the girl, one to the other, after which each girl's guardian gives *gur* or fruits to the guardian of the boy to whom the girl is betrothed. The Brahman, if present, does the *Ganesh Sthapan* and reads *Gotrachar*. The *gur* or fruits are taken home and distributed. Sometimes the betrothal is confirmed by respectable members of the brotherhood even without the presence of a Brahman.

" CLASS III.—On payment of money (*takke*)—

" The first thing done is to settle the amount of money which has to be paid. Some people consider it objectionable to give publicity to the payment of money, others do not mind it. In the first case the formalities observed in case of the *Dharam* betrothal are gone through, and no mention is made in the brotherhood of the payment of money. In some cases where the parties have not enough mutual confidence, mention is made of the payment in the assemblage. Where publicity of the payment is not considered objectionable, the guardian of the boy goes to the house of the girl with a few relations and trustworthy friends of his own. The girl's guardian names the amount which is generally paid in two instalments—(1) at the time of betrothal, and (2) at the time of marriage (to meet the expenses). The first instalment is paid at the time and *gur* and fruits are given by the daughter's guardian to the boy's father and relatives. *Gotrachar* is read by the Brahman. After the above formalities, a betrothal is considered complete and binding. A betrothal cannot be revoked after it has been completed in the above manner unless the conditions on which the contract is made (in classes II and III, are not fulfilled.

" *Labanas*—

" A few men of the brotherhood go to the girl's house on behalf of the boy. The girl's guardian pays a *takka* (6 pies) to the priest (*Dharamsalia*) and the boy's side pay him 1 rupee and a *takka* (6 pies). The priest recites *Ardas* (prayer) in the *Dharamsal*, and the betrothal is completed. The boy's side distribute some sugar among the brotherhood. The betrothal, when confirmed, cannot be revoked unless the conditions on which the contract was made are not fulfilled.

"NOTE.—The main features of a betrothal are the offer and acceptance of the alliance at the girl's house and the offering of a prayer in presence of a number of persons by way of giving publicity to the arrangement. Other formalities are added which differ slightly in case of each tribe. With a few exceptions some sort of a present is given at the time for the girl. This usually takes the form of clothes or ornaments or both. Sweets of some sort are also distributed to mark the occasion. Girls are generally looked upon as a valuable property. Among the Hindus *Dharam* relationship (in which no money or consideration passes for the girl) is confined only to the well-to-do families, but ordinarily a girl is not given in marriage unless money is paid (openly or secretly) or a girl is given in return into the family. Among the Khataks the right of giving a girl in marriage is greatly valued and no bones are made about the payment which has to be made for the girl. Among the other tribes too, the custom of paying a price for the wife is very common. This appreciation of the value of the female sex is obviously due to the shortage of females as compared with the males in the district and it is on this account that the boy's refusal to marry the girl is usually punished only with the loss of the present made to the girl, while on the other hand, a person refusing to give his girl in marriage after contract of betrothal has not only to return the presents received from the boy's guardian but has also to pay damages.

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Ceremonies relating to marriage.

" *All Musalmans*—

" The only binding ceremony which completes the marriage is the *nikah*.

" The chief formalities are :—

" Asking the consent of parties—

"(*Ija Qabul*) before two witnesses and the fixing of dower (*haq Mahar*). The other ceremonies connected with a marriage are not indispensable. The usual procedure at the wedding is as follows:—

"The marriage procession, consisting of the bridegroom, his male relatives (and female relatives among Jats) and friends, goes to the bride's house usually in the evening when the *nikah* takes place. If the marriage is to be consummated, the bride and the bridegroom are dressed in suits of clothes presented by the other party. Sweets are distributed and the procession returns home with the bride generally after staying at the bride's house overnight.

" NOTE.—When the marriage is not to be consummated at once, *i.e.*, when the parties are minors, the changing of clothes does not take place. The bridegroom's guardian takes a suit of clothes and some ornaments for the bride, the bride is dressed in these after the *nikah*. The brides's side present a suit of clothes to the bridegroom which he similarly puts on. The ornaments which the girl wears before the marriage are often presented to her by the parents, but it is not necessary to do so, and they are generally taken off at the marriage and kept by the parent. Whether the marriage is consummated or not and whether or not the clothes are changed, the marriage becomes absolute after the *nikah* has been read. It is not an uncommon thing for the bridegroom to go to the bride's house with a limited following and have the *nikah* read. The marriage (*shadi*) ceremonies follow after some time including the marriage procession and all but the *nikah* having already been read, the only ceremony performed is the changing of clothes and the bridegroom's party then returns home with the bride.

" *Hindus*—

" The forms of marriage prescribed by the Hindu Law are not known. The ceremonies observed are these :—

" The marriage procession starts from the bride's house on the appointed evening. On the way the bridegroom cuts a twig of *jandi* (*Prosopis spicigera*). On arrival of the marriage procession at the bride's house the first ceremony performed is called *pishkara*, which consists of an exchange of courtesies between the bridegroom and bride's father or guardian, each anointing the forehead of the other with paint (*tilak*). The bride (*kuri*) and bridegroom (*gabhru*) are then seated on *kharas* (baskets placed upside down) in the *bedi* (a small canopy prepared for the occasion) and a ball of kneaded flour is placed between them; the bride and bridegroom join their right hands and the Brahmans who are seated around the *bedi* read the *paddhaki* (ritual). This ceremony is called *hathleva*. The *kanyadan* next takes place, the bride's father or guardian making a gift of the girl to the bridegroom by taking a handful of water, and sprinkling it on the girl. The *lawan* ceremony is then performed, the pair with their dresses tied together circumambulating the *havan* (sacrificial fire) three times. The bride then changes her dress and food is served to the guests; after which the marriage procession returns with the bride.

Restrictions as to marriage.

" The Musalmans follow the Muhammadan Law in respect of marriage, *i.e.*, marriage is allowed with any relation outside the limits of consanguinity prohibited by the *shariat*. A man of one tribe may marry a woman of any other tribe, but marriages are generally confined to one's own tribe and clan and when possible alliances are arranged between the offspring of brothers or sisters which is a means of keeping property inherited by the

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boy or the girl within the same family. Among the Hindus, marriage among one's own *zat* (clan) or *got* is not allowed. A man cannot therefore marry a woman who is an agnate of his, nor can a woman marry a man who is an agnate of her father. The result is that one's relations through his mother, sister, wife, or daughter always belong to a different *got*. There have, however, been exceptions to this rule in the Isa Khel Tahsil, where Sachdev and other Aroras have contracted marriages within their own *zat* or *got*. They have been something like excommunicated by the other Aroras, but the separation is by no means complete. The exceptional action of Sachdevs, etc., is obviously due to the influence of Pathans among whom they have lived for generations. On the other hand a Hindu is not supposed to marry outside his own caste, tribe or *kom*, *i.e.*, a Brahman may marry a Brahman, a Khatri a Khatri, an Arora an Arora. But instances of a man of a higher caste marrying a woman of a lower caste are not uncommon. Girls brought in from outside the district are often welcomed into wedlock by Aroras on fairly heavy payment, if they are only called Hindus, and no attempt is made to ascertain the caste of the girls. In this way many a low caste girl, often a sweeper and usually a kidnapped person, enters an Arora's family as a Hindu. A Musalman may not marry his wife's sister during her lifetime, but there is no such prohibition among the Hindus. There is no limitation as to the age at which the marriage may take place. In practice a man may be of any age, but girls are generally given away in marriage before they are fourteen or fifteen years of age except among Khattaks who allow their unmarried girls to grow older. Instances have been quoted both by Hindus and Musalmans where boys and girls were married between the ages of 3 and 6 years ; but in such cases the marriage is not consummated till the girl has attained the age of 14 or 15.

"In case of infant marriages, a Musalman girl does not go to her father-in-law's house till she is of age and till the final marriage ceremony of changing the clothes has been performed. Among the Hindus, however, a minor wife is supposed to live in the house of her husband's guardians, being also permitted to go and live with her parents every now and then. The principal marriage ceremonies are the *nikah* among the Musalmans performed according to Muhammadan Law and the *hathleva*, *kanyadan* and *lawan* among the Hindus. There are several other ceremonies performed at the time of marriage which are subject to variation and are not essential.

Polygamy.

" There is no limit to the number of wives a Hindu may have at one time. He does not however generally marry again in the lifetime of the first wife, except in case of her barrenness or of serious unevenness with her or her relations. The Labana Sikhs do not mind taking a second wife in order to be able to keep a deceased brother's wife in the family. A Musalman can only have four wives at one time, and those who can afford to do so often run up to the prescribed limit. Indeed some have as many as five wives, when the last marriage being invalid under the Muhammadan Law, some such device as the nominal divorce of the oldest wife has to be resorted to. The poorer people usually marry one wife at a time and the middle classes generally content themselves with two. When an average landowner can lay by some money, his first thought is to arrange to take a second wife.

Karewa.

" The custom of *karewa* is confined to the Labana Sikhs and the principal ceremony is the throwing of the man's sheet over the couple seated together, the reading of *ardas* and the distribution of sweets. Widow marriage is common among the Musalmans, being celebrated by the reading of *nikah* as

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in the case of the first marriage, the marriage procession and other superfluous ceremonies being dispensed with. The Hindus do not recognize widow marriage, but owing to the introduction of the Arya Samaj doctrines several widow marriages have taken place among Aroras and have not met with severe disapprobation.

Divorce.

"Divorce is allowed among the Musalmans. A wife is seldom divorced among the respectable families, but cases of divorce are not rare among the common people. A wife is usually divorced for adultery. Cases of divorce for other causes are less frequent, as the wife is considered a valuable asset by the common *zamindar*. Indeed among the Khattaks even adultery is not considered a sufficient cause for divorce, rupees 25 being taken as sufficient compensation to be paid by the paramour in a case of suspected adultery and the man being absolved of all blame if he and six others swear to his innocence. To complete the severance of the marriage tie, a man has to say the *talaq* (I divorce you) to the wife three times. The divorce is not irrevocable if *talaq* is said only twice. A wife duly divorced cannot be re-admitted into wedlock unless she marries another man and is divorced by him, the period of *iddat* being passed on each occasion. *Zan talaq*, which is equivalent to 'may my wife be irrevocably divorced if I tell a lie', is a very common form of oath in this district among the Musalmans. There is no such thing as divorce among the Hindus.

Dower.

"The amount of dower prescribed by Muhammadan Law is one gold *mohar* and a hundred *takkas*, which is in this district considered to be equal to Rs. 25. The amount actually fixed at marriages varies in the different tribes from Re. 1 to Rs. 50 and in well-to-do families it goes up to Rs. 1,000. Dower is payable before the consummation of marriage, or whenever the wife demands it, unless she foregoes the right, which is often done. The ornaments presented to the wife are usually treated as dower, and if their value exceed the sum named, the whole dower is considered to have been paid up.

Abduction (*Udhala*).

"The Pathans have peculiar customs relating to *Udhala* or abduction. All Pathans, except Khattaks, demand two *sharams* (girls) in lieu of one virgin or widow abducted and four *sharams* (girls) with or without damages in lieu of one married woman if she is proved to have been enticed away. If the abductor has no girl in his family he has to pay money instead.

"The Khattaks (including Bhangi Khels) put a money value on abductions, Rs. 500 being the compensation or fine which an abductor has to pay except among Khattaks of Chapri and Chashmia who do not go above Rs. 300. Rules are laid down as to how the compensation is to be disposed of. An offender may not return to his home without the payment of the sum, and if he does, the people consider him liable to pay the money in a civil court. How far civil courts would act upon the undertaking is a different question, but the Khattaks are very keen on the usage which was forced upon my notice by people and attested by me with universal approval in an enormous gathering."

Polyandry is unknown in the district.

Polyandry.

Female infanticide.

Female infanticide was never a custom in this district even before British rule, and though in former times certain sections of Hindus used to treat their female children with indifference, yet even their custom has changed completely in this respect.

The Muhammadans generally regard a daughter as valuable property, which the parents dispose of to the best advantage. With a few exceptions the Hindus do the same.

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The general custom is that the daughters do not inherit any share of the property in the presence of sons or their lineal male descendants or of widows. They are, however, maintained till their marriage. When there is no son, grandson or widow, the daughter or daughters inherit the property till marriage, when it reverts to collaterals, if any, within 4 to 6 generations upwards. In the absence of collaterals within the said degree, the daughters inherit the property absolutely and it devolves on their offspring after them. The limit within which collaterals can exclude daughters from retaining the property after marriage varies slightly in different tribes, but notwithstanding a few exceptions in which married daughters have deprived near collaterals, the general custom is strongly in favour of collaterals. Sisters and their descendants are treated similarly to daughters, but in the matter of absolute inheritance come after daughters and their offspring.

Language.

The Bhangi Khels and the Khattaks at the extreme north-west of the district speak a Pashtu which differs slightly from that of Peshawar. It is perhaps somewhat coarser. The difference consists mainly in the pronunciation of letters, *e. g. Sh.* is often used instead of *Kh.* Many different words are also used, *e. g.*, *marai* for *dodai* (bread). The following is an extract from the old Bannu Gazetteer :—

Mr. Thorburn writes " I remember soon after I came to the district, a Yusufzai orderly translating something I had said to a Bannuchi villager. When the man had done, the latter shook his head helplessly, and said ' Speak Pashtu, as I don't know Hindi.' This case well illustrates the divergence there can be between two dialects of Pashtu." What Mr. Thorburn said of the Bannuchi applies equally to the Khattak. The Niazais of Isa Khel can understand Pashtu more or less, but they have given it up as a spoken language. In Mianwali, the only Niazais who still speak Pashtu are the Sarhangs of Bori Khel and Ghundi, who are cousins of the Sarhangs of Sultan Khel and Isa Khel, and form an isolated colony in the Mianwali Tahsil.

The rest of the population of the district speak a dialect of Panjabi, which is known as Jatki, Hindki, or Multani. This dialect varies in different parts of the district. In the Bhakkar Tahsil it is identical with the dialect spoken in the Muzaffargarh District (see O'Brien's Glossary of Multani revised by Sir James Wilson and Pandit Ha Kishan Kaul). In the Thal portion of the Bhakkar Tahsil an admixture of Jhang words and an approximation to the Jhang accent exhibits itself. In the Khurdi

CHAP. I-C. Population. Language.

tract the language spoken is practically the same as in the Talagang Tahsil of the Attock District and in the Salt Range portion of Shahpur (see Sir James Wilson's Grammar and Dictionary of Western Panjabi). The dialect of the rest of the Mianwali and Isa Khel Tahsils is a combination of the two languages above alluded to, *viz.*, Multani and Salt Range Western Panjabi. Although the dialects of the district differ greatly from Panjabi proper, yet a man speaking any style of Panjabi can as a rule be understood, except by the Khattaks. Those Khattaks who live at the foot of the hills can understand and express themselves in the local Panjabi in a fair degree, but those residing higher up in the hills cannot understand a word of what they call Hindko. Any who can understand it, usually take a pride in professing complete ignorance of it.

Literature.

None of the local dialects is a written language, but in every part of the district there exists a type of literature in the form of poetry, which is usually remembered by heart, but occasionally reduced to writing in the Persian character. The compositions are crude and for the most part consist of songs in praise of God (called *sifat*), love songs, and lullabies, which the women are in the habit of crooning.

Both Multani and the Salt Range dialect are strong in sayings and proverbs, but the rough Niazai is more prosaic and has not much taste for them.

Tribes and castes.

Table No. 15 gives the figures for the principal castes and tribes of the district with details of sex and religion, and also supplements of the various sub-divisions of Jats and Rajputs.

The following are the chief landholding tribes, and are notified as agricultural tribes within the meaning of the Land Alienation Act :—Ahir, Arain, Awan, Baghban, Biluch, Gujjar, Jat, Kharal, Khokhar, Qureshi, Pathan, Rajput, Sayyad.

There is no distinction of caste properly speaking among the Musalmans. Islam grants the same privileges to all followers of the religion. There are however different *koms* or tribes and the word *zat*, which is the equivalent of caste, is loosely applied to the tribe or clan. There are social restrictions within each tribe and feelings of superiority and inferiority of one *zat* compared with another are strong. The Hindus follow the caste system and the Brahmans, the Khatris and the Aroras are bodies quite separate from one another and do not generally intermarry. In matters of eating and drinking and other social usages, however,

no distinctions are made and thus the restrictions of caste are not nearly so stringent as in some other parts of the Province.

CHAP.I-C.

Population

Tribes and castes.

The Musalmans are divided into bodies known as tribes (*kom*), each supposed to consist of descendants through males of a common ancestor and living together in villages or groups of villages. The principal tribes of the district are Pathans including Khattaks, Awans, Biluches, Sayyads, Qureshis and Jats. The menials are known by the names of their respective professions (*e.g.*, Tarkhan, Lohar, etc.), and live among all tribes. When they have acquired land and held it for some time they begin to claim to be the members of the tribe with which they live. Weavers in many places call themselves Turkhels (Tur=weaver's winding beam, and Khel=group) or gentlemen of the loom, and they try to call themselves Turkhel Pathans or Turkhel Jats, according as they live among Pathans or Jats, although the Pathans or Jats do not own them. A Musalman will give his *kom* as Pathan, Awan, Biluch, Lohar, etc. The Hindus use the word *kom* or tribe to denote what is really caste. For example he will call himself an Arora by *kom*. The Hindus are scattered all over the place living in small numbers in every large village and in strong bodies in old towns. The order of precedence among the Hindus is (1) Brahmans, (2) Khatris, and (3) Aroras. Most of the Aroras call themselves 'Khshatra Varna' or of the Khatri caste, but, whether they belong to the Khatri or Vaisha class, they are undoubtedly looked upon as inferior to the Khatris proper.

Among the Musalmans, the Sayyads are looked upon as the highest tribe and Qureshis come next. These two tribes may marry women of other tribes, but out of respect for these tribes no man belonging to the other tribes marries a Sayyad or Qureshi girl. The Pathans, Biluches and Awans consider themselves to be one superior to the other, and as a proof of their superiority each will give instances of women of the other tribes being married into that tribe. The fact however is that intermarriages on a small scale take place between all these tribes and it is difficult to say which of them is socially of the highest rank. In the south of the tahsil, the Jats claim equal position with Pathans, etc., but in the northern half of the district, their status being mostly that of tenants and not of landlords, they own their tribal inferiority. As a proof of this may be quoted the instance of a village named Trag in the Isa Khel Tahsil owned by Jats, who, although Jats, consider it *infradig* to be called Trag Jats and try to pass themselves off as Trag Niazais (*i.e.*, Pathans).

CHAP I-C. Population. Clan.

Each tribe is sub-divided into clans also called *zats*. The upper half of the district being largely inhabited by Pathans, the clan is known there usually by the name Khel such as Isa Khel, Musa Khel, Ballo Khel, Watta Khel, etc. Even Jats living in that part class themselves by Khels and some of the Hindus are also known to belong to certain Khels such as Thakare Khel, Chandne Khel, Rame Khel, Rochi Khel. The term Khel really means a group and a Khel denotes the group descended from one ancestor, being very much smaller than the larger group called *kom* or tribe. The Awans call their clan by terms consisting of the name of the ancestor with the suffix ál such as Sighál, Hulchál, Ahmadál. The Biluches have their specific clans or *zats* such as Hot, Rind, Chandia, but generally ending in *Ani* as Jaskani, Kupchani, Mamdani; similarly the Jats are Khoawars, China, etc. The *zats* among the Hindus are such as Adhlakka, Chandana, Khanija, Mendiratta, all sub-divisions of the Arora caste or tribe. Among the Pathans and Awans there are larger sub-divisions of the tribes under which the clans are grouped, *e.g.*, Niazai, Sarhang, Khatak, Biluchch, Multani among Pathans and Achhral, Darhal and Band Alikhel among Awans. The Hindus similarly have their larger sub-divisions of Utradhis and Dakhnas in Aroras and so on.

Family.

The group of agnates descended from a common ancestor through males within a few generations is known as a family called Ghar or sometimes a *jhugga* and often indicated by the expression *hik piu de* (descendants of one father). The females go out of the family as soon as they marry, so the descendants of female agnates are not included in the family. The agnate family is the basis of the clans and sub-clans in a tribe. A Pathan will for instance describe his descent by saying that he is a Musa Khel Niazai, being a Khalas Khel, that he had seven fathers (meaning there were seven brothers of whom his ancestor was one) and that he and a, b, c, were *hik piu de* or descended from one ancestor. Four or five generations are usually the limit of the close family tie.

It is unnecessary to attempt a description of every tribe found in the district. Many of them are found all over the Punjab and most of them in many districts. It will be sufficient to notice briefly some of the leading tribes, and especially those who are important as landowners.

Pathans.

There are four different tribes of Pathans in the district, the Niazais, Khattaks, the Biluchch Pathans, and the Multanis :—

(*i*) The Niazais.

The Niazais are Lodi Pathans, who came from the north-west and settled in the Mianwali and Isa Khel Tahsils. They are divided into many sections and clans, of which the principal in Isa

CHAP. I-C. Population. Pathans—(i) The Niazais.

Khel are the Isa Khel, Sarhang, and Mushani, and in Mianwali, the Adris, Taja Khels, Musa Khels, Pai Khels, Bori Khels, and Daud Khels. Each clan has further sub-sections. As a tribe the Niazais are indifferent cultivators, and still possess a good deal of Pathan-like pride of race. They make good soldiers and are not averse to taking service. Those on the Mianwali side of the river are better farmers. Of all sections of the Niazais, the strongest are the Isa Khels and Taja Khels, the latter numerically, and the former owing to the position and influence of their heads, the Khawanin. Both still retain traces of a fighting race accustomed to rule over others weaker than themselves. The Taja Khels are overlords of a number of villages in the Kachhi.

Niazais are generally fond of sport and they sometimes give vent to this fondness by organizing pre-arranged free fights, which originate in some trivial affair, and terminate in several broken heads. On these occasions, the youths of one village issue a challenge to those of another, fixing a specified time and place and the fight ensues accordingly. If sticks only are used, the public sentiment regards it as a fair fight, even though several participants come to grief and others have to go to jail by the dozen.

(ii) Khattaks.

The Khattaks preceded the Niazais into the north of the Isa Khel Tahsil, and have clung to the hills, one section called the Bhangish or Bhangi Khels occupying the tract known by their name in the Isa Khel Tahsil, and one village opposite their own country across the Indus in the Mianwali Tahsil. The other section of Khattaks, called the Guddi Khels, hold the villages on the skirts of the Maidani range. The Khattaks are a hardy, labourious tribe, and make excellent cultivators. Individually, they are poor, and many augment their scanty income from land by cutting grass and fuel from the hills, which they sell in the market at Kalabagh. They take service freely in the army, particularly the Bhangi Khels, among whom there is scarcely a household, which has not furnished a soldier to the army. The Bhangi Khels are esteemed the swiftest footmen and best mountaineers in British territory. Physically, they are strongly built, though shorter in stature than any of the other Pathan clans in the district. In disposition they are simple, faithful, and orderly, and make good and reliable soldiers. They are fond of money and every man, who has any, keeps a hoard buried in his house.

(iii) Biluchch Pathans.

The Biluchch Pathans came originally from Paniala across the river in the Khasor hills. They are found at Piplan and Jandanwala and in the Thal tracts, which neighbour these villages. Their number is not large. They are notorious for the faction feeling, in which they indulge, both amongst themselves and towards their peaceably inclined Jat neighbours.

CHAP. I-C. Population. Pathans— (iv) Multani Pathans.

A few Multani Pathans from Dera Ismail Khan have acquired lands in the Bhakkar Tahsil and have settled there. They originally came from the Multan neighbourhood, whence their name is derived.

The Awans.

The Awans are for the most part confined to the Khudri tract of the Mianwali Tahsil, which is also called Awankari after them. Only two Awan villages, Kalabagh and Jalalpur, lie west of the Indus in the Isa Khel Tahsil. A certain number of small Awan settlements are also to be found scattered about the Thal in the Bhakkar Tahsil. The Awan is not industrious by nature; he is factious and fond of litigation. Unlike the Niazai, he has a great love of ease and, if he can afford it, will seldom go about without a *mirasi* or *nai* (barber) to attend him. He is generally well built and a good horseman, but is of inferior physique to the Niazai.

The Biluches.

The Biluches travelled up from the south and are allied to the Biluches of the Muzaffargarh and Dera Ghazi Khan Districts. The strongest Biluch clans are the Lisharis, the Gishkoris, the Sarganis, the Mamdanis, the Kulachis, and the Chandias. They live scattered about the riverain tract of the Bhakkar Tahsil, and there are one or two settlements in the Thal, among whom the Magassis, a small clan settled at and around Dhingama on the Jhang border, present some features of interest. They are supposed to have come originally from Jhal Magassi in Sindh, and a place called Amirgarh, of which ruins still exist at Nawankot in Leiah, is said to have been founded by their leader, Amir Khan, Magassi. This clan has certain customs peculiar to itself. The reputed characteristics of the Biluch are indolence and a fondness for hospitality, and these qualities are fairly conspicuous in the Biluches of this district.

The Sayyads.

The district contains a large number of Sayyads; these have secured a large share of the best lands in the district, and they abound especially in the riverain tract. They own, for instance, all the villages of the Sadat Miani, which lies at the southern end of the Mianwali Tahsil, and is called after them. They are also numerous throughout the Bhakkar Kachhi, where they hold an influential position. In the Thal and submontane tracts, where the life is harder, they are more rarely found. The lands held by Sayyads were generally acquired by grants from old Biluch or Pathan rulers, or by gifts from individual *zamindars*. Biluches, especially, used to have an inordinate respect for them, and they are still much revered both by Biluches and Jats, but the respect

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Population

The Sayyads.

felt for them nowadays does not so often take the form of substantial gifts of land. As land-owners they are lazy and thriftless, and in general intelligence they are hardly distinguishable from the Biluches, Pathans or Jats, amongst whom they live. Though many of them still exercise considerable influence, their hold as a class on the people is much weaker than it was fifty years ago. The struggle for existence caused by the increase of population since annexation has knocked much of the awful reverence the Pathan *zamindar* used to feel towards holy men in general out of him. He now views most matters from rather a hard worldly than a superstitious standpoint. Many a family or community would now cancel the ancestral deed of gift under which some Sayyad's brood enjoys a fat inheritance. But for the criminal consequences which would ensue from turning them out neck and crop, the spiritual consequences would be risked willingly enough.

Qureshis.

The Qureshis are a small tribe, who are scattered about the district, but are more numerous in the northern tahsils. In Mianwali Tahsil one whole village is owned by them. They are held in high esteem and, as elsewhere, possess a reputation for sanctity.

The Jats.

The Jats, who, with insignificant exceptions, are all Muhammadans, form the most numerous tribe in the district, and at the 1911 census represented 33·7 per cent. of the total population. They occupy the greater part of the Bhakkar Tahsil, and are also spread about the riverain tract of the other two tahsils. The Thal portion of Mianwali Tahsil is also held almost exclusively by them. They are divided into numerous clans (called *zat* or *got*). There is really no distinction made in the district between Jats and Rajputs, and consequently Sials, Bhachchars and others, who consider themselves of Rajput origin, are commonly classed as Jats. The Jats are on the whole an energetic, thrifty race. Compared with the Niazais, they are of darker complexion, of shorter stature, and less well-knit. When properly nurtured, however, they are strong, well-made men. Those who live in the Kachhi, being more subject to autumnal fever, and leading almost amphibious lives, have a weaker physique than their upland brethren. Between the different clans there are no particular marks of distinction.

Hindus and Sikhs.

The greater part of the Hindu population consists of Aroras, some of these being Sikhs. There is also a sprinkling of Brahmans, Khatris (of whom also some are Sikhs) and Rajputs. There are a few Rajput Sikhs and one family of Jat Sikhs. Labanas with a few exceptions are all Sikhs. The Aroras represent nearly 82 per cent. of the total number of Hindus. They

CHAP. I-C. Population. Hindus and Sikhs.

are divided into three main tribes, Uttaradhi, Dakhna, and Dahra, of which the two former are the most numerous. These again have several sub-divisions, the most important of which are the Kalras, Chandnas, Mendirattas, Geras, Adlakhas, Kathurias, and Nangpals among the Dakhnas, and the Khanejas, Sachdevs, Gulatis, Mendirattas, and Nangpals among the Uttaradhis. In the Bhakkar Tahsil and especially in Bhakkar town and its neighbourhood, the Hindus hold a very strong position and own a large proportion of valuable land. The Sachdev Aroras in Isa Khel are also large landholders and possess considerable influence.

The Labanas are a low caste, who live by rope making, and reside in the riverain tract, where a large supply of *munjkana* is available for this industry.

Low castes.

Among low castes, the most common are the Kutanas and the Ods.

Leading families—

In the following paragraphs brief accounts are given of some of the leading families of the district :—

The Isa Khel Khans.

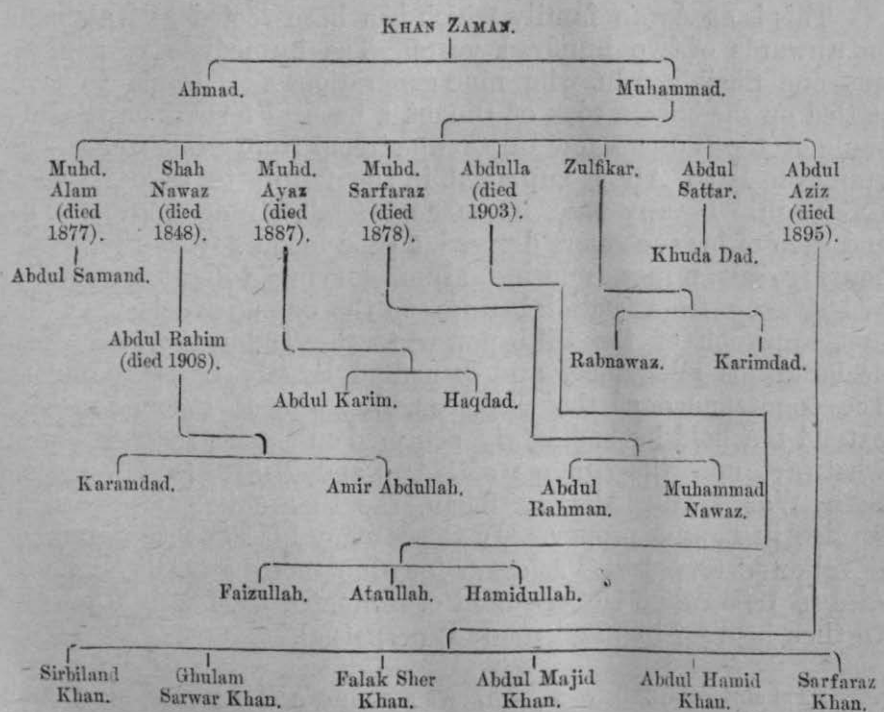
Isa Khan, the common ancestor of the Isa Khel clan, left two sons, Zakku and Apu, and two grandsons, Badu (Badan) and Mammu. Their respective descendants are known by their patronymics. For many generations the clan was not governed by chiefs, but by its counsel of elders. In time, feuds between the different sections became frequent, the numerically stronger domineering over the numerically weaker. Thus Zakku Khels and Apu Khels were both weak, and the Badanzais and Mammu Khels strong. This state of things continued until the time of Khan Zaman Zakku Khel. Procuring help from Ahmad Shah, Durani, he raised himself to the chiefship, and so turned the tables on the two rival sections who had so long oppressed him. In 1761 he led a troop of his clansmen to Panipat, and took part in the battle which destroyed Mahratta pretensions in Upper India. His son Umar Khan succeeded him and administered the southern parts of Isa Khel in the interest of the Nawab of Mankera. It was this Umar Khan who excavated the canal called after him, and did so much to revive and develop canal irrigation. He was allowed one-quarter of all revenue collections made by him. Ahmad Khan, his son, succeeded to his position. Under him the fortunes of his house continued to improve until the Sikh conquest of Isa Khel. When that had been effected, Ahmad Khan and his family took refuge in Bannu proper and in Dawar. On his death in exile in 1838 Muhammad Khan, his brother, made terms with his new masters, and was granted one-eighth of the revenues of

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Population.

Leading families—Isa Khel Khans.

Isa Khel and one-third of the proceeds from the alum pans at Kotki, instead of one-quarter of the former and all the latter, which he and his father before him had enjoyed in the Nawab's time. But the rapacity of Diwan Lakhi Mal, the Sikh *kardar*, drove the family once more into exile, and it was not until nearly ten years later that they returned and were reinstated in all their old rights and privileges by Major Edwardes. The restored Khan proved his gratitude a few months afterwards by siding with us throughout the second Sikh War. His third son, Shah Nawaz, was killed in action near Multan in 1848 before the eyes of his benefactor, and his other sons joined Fateh Khan, Tiwana, in withstanding the Sikhs in Bannu proper. Muhammad Khan died in 1855, having first divided his property into eight equal shares, one for each of his seven sons, and one for his grandson, Abdul Rahim Khan, son of Shah Nawaz, just mentioned. Government confirmed the *jagir* in perpetuity in the same shares after reducing the alum proceeds item to a sixth. When the Mutiny broke out, the Khans again came forward, and did right good service both in the neighbourhood of Delhi and in the district, for which they were rewarded with special life *jagirs* and pensions. Below is their genealogical tree, omitting the common surname "Khan":—



CHAP. I-C. Population. Leading families— Isa Khel Khans.

Of the sons of Muhammad Khan Nos. 1 to 5 are by his senior wife, No. 6 by his second wife, and Nos. 7 and 8 by his youngest wife. Of the present members of the family Muhammad Abdul Karim Khan received the title of Khan Bahadur in 1910. He and his two cousins, Muhammad Abdur Rahman Khan and Muhammad Faizullah Khan form a Bench of Honoray Magistrates, exercising 2nd class powers. Muhammad Ataullah Khan is an Extra Assistant Commissioner, Khuda Dad Khan is a Deputy Superintendent of Police and Muhammad Sarbiland Khan is a Sub-Registrar at Isa Khel. The property of Muhammad Nawaz Khan, including that portion of it which is jointly shared by him with his brother Muhammad Abdur Rahman Khan, is administered by the Court of Wards. This property includes an estate at Jalpana in the Shahpur District.

The Khawanin of Isa Khel enjoy what is called the *hashtam* allowance besides personal *jagirs* and pensions. The *hashtam* allowance is a cash allowance paid from the treasury in perpetuity in lieu of one-eighth of the land revenue of certain villages in the Isa Khel Tahsil, one-sixth of alum proceeds at Kotki, and a fixed sum by way of compensation for not receiving water dues on a canal in kind.

The Malik of Kalabagh.

This is an Awan family which has been rooted at Kalabagh for upwards of two hundred years. The immediate progenitor was one Shaikh Adu, who, nine generations ago, is said to have settled on the barren rock of Dingot, a natural fortress on the left bank of the Indus a few miles up-stream from Kalabagh. His grandson Band Ali is supposed in the family to have founded Kalabagh. In any case he made himself strong there, and he and each of his successors derived a good income from the neighbouring salt mines, making alum, levying toll at the ferry, and latterly from judicial fines on the Bhangi Khels. At the first approach of the Sikh power to the Indus, the then chief declared his allegiance, and benefited largely in consequence. The countenance of the Sikhs enabled him to strengthen and extend the hold he had lately acquired on the cis-Indus lands of what are now the villages of Masan and Niki. In the second Sikh War Malik Allayar Khan, the then chief, did us useful service in Bannu proper. In the Mutiny his son with a number of followers served in Peshawar for nine months. Allayar Khan died in 1863, when Government consolidated the family *jagir* until then held for life, and made it perpetual.

His son, Muzaffar Khan, was made a Khan Bahadur, and

CHAP. I-C. Population. Leading families— The Malik of Kalabagh.

died in 1885, being succeeded on his death by his eldest son, Yar Muhammad Khan, who had been made an Honorary Magistrate during his father's lifetime. Malik Yar Muhammad Khan lived until 1908. He was a fine specimen of an old country gentlemen, a hard taskmaster but very generous, a careful manager of his property, but extravagant at the same time, fond of sport, keen on horses and hounds, and above all most hospitable and fond of entertaining. He was enamoured of his land to a fault, and even in old age rode regularly out in the mornings to some part or other of his domains, and personally superintended the operations of ploughing, sowing, reaping, embanking or levelling-up lands.

Some of the embankments constructed by him in his *jagir* village of Massan with masonry outlets are excellent examples of what can be done in the way of reclamation of land by crude methods with a little intelligence. He kept up the tradition of his family in maintaining a large stud of excellent brood mares, and he obtained from his stud a splendid stock of horses and mules. He would never consent on any account to sell a mare, and his love of riding was so great that even when he could not walk, he would mount a horse and remain for hours in the saddle, and he would never ride anything but a spirited four-year old, even though all that his strength permitted was to go about at a walk.

He has been succeeded by his only son Khan Bahadur Malik Ata Muhammad Khan, upon whom the title of Khan Bahadur was conferred in 1911. He has also succeeded to his father's seat as a Provincial Darbari, and, as an Honorary Magistrate, exercises 2nd class powers.

During his father's later years, he undertook the financial management of the properties with such success, as enabled a handsome surplus to be put aside annually. At the last settlement the *jagir* was valued at a total of Rs. 7,435, excluding a perpetual assignment of ten per cent. on the revenue of the Bhangi Khel tract in lieu of certain rights enjoyed there before annexation by the ancestors of the family.

For the last five generations the eldest son has in each case succeeded to all the property left by his father, and the rule of primogeniture has now been recognized to prevail in the family by a notification under the Descent of Jagirs Act. Younger sons are only entitled to a fitting maintenance. The chance that two eldest sons in succession were both able men and that the

CHAP. I-C. Population. Leading families— The Malik of Kalabagh.

estate did not devolve until they had attained middle age, enabled first the one, and then the other, in Sikh times to exclude his younger brothers from their share, and warranted Government in considering the rule of primogeniture so established. On annexation the cadets of the family sought to obtain in the law courts what they conceived were their rights, but none of the claimants succeeded in getting more than a maintenance allowance decreed to him.

The Mianas of Mianwali.

Mian Ali, who founded Mianwali in Ghakkar times, is said to have been a holy man from Bagdad. He gained ascendancy over the Pathan settlers in the country by encouraging them to throw off the yoke of the Ghakkars. His promises of success were fulfilled, and the Ghakkars were driven out of the country about the middle of the 18th century. His son Sultan Zakria was spiritual guide of the peasantry for many years, and is credited with having possessed miraculous gifts. To him succeeded his son Muhammad Ali, a less-known man. In 1847 Muhammad Ali's three sons, Chiragh Ali, Murad Wand (or Ali), and Ghaus Ali were in power, and rendered Lieutenant H. Edwardes valuable assistance in settling a blood feud which had until then cost many lives annually. From that time the family exerted all its influence on the side of the British Government.

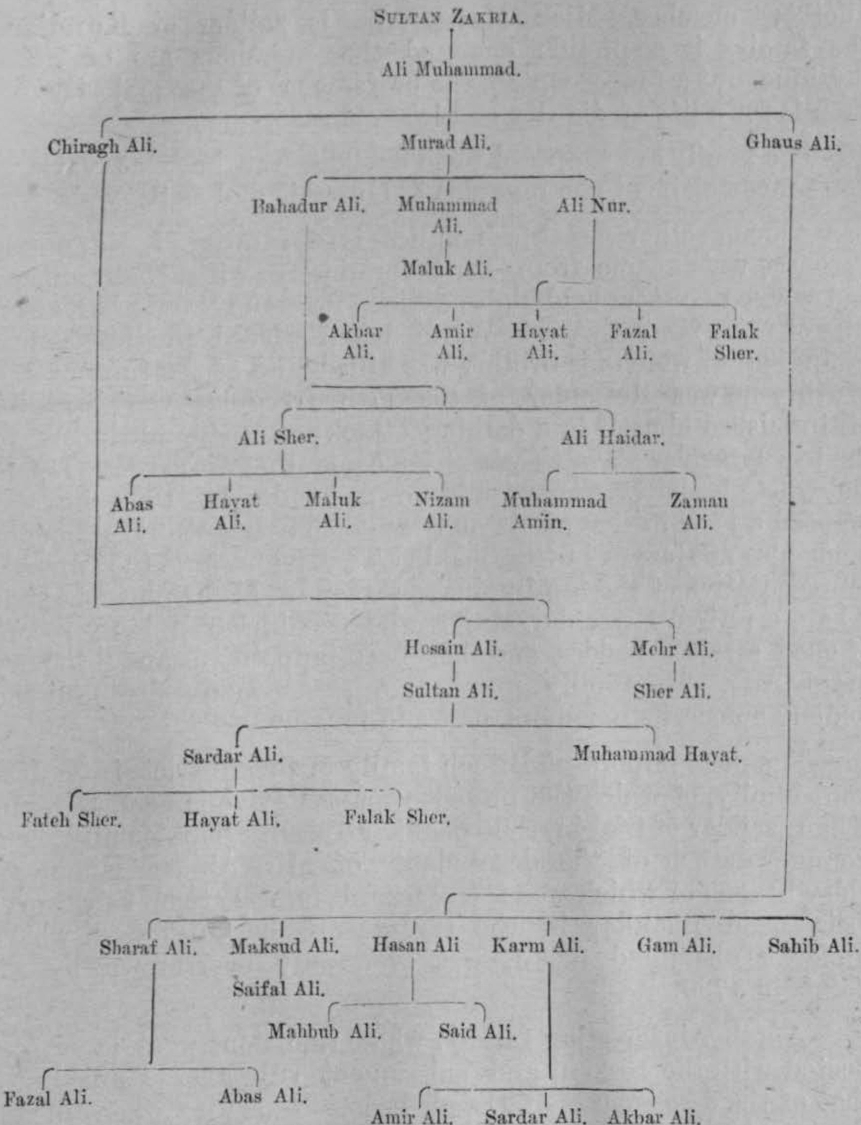
Mian Muradwand is said to have possessed some of the miraculous powers of his grandfather, a gift by which he seems to have profited to renew the influence of the family. During the Sikh rule, one Ram Singh Chhaprewala is said to have come to Mianwali on a punitive expedition, and being dissatisfied with the behaviour of the people, ordered the village to be plundered. The order was to be carried out on the morning following. The elder brother of Muradwand, Chiragh Ali, was in great trepidation, but was assured by Muradwand that it did not please God that the order should be carried out. During the night, Ram Singh was three times thrown from his bed, with the result that in the morning the first thing which he did was to countermand the order to plunder. He next rode to the house of the Mianas, whom he summoned to his presence. All came out but Muradwand, whereupon Ram Singh said that the man whom he required was not before him. Muradwand was accordingly sent for and on his arrival was at once recognized by Ram Singh as the man who had, in spirit, given him the rough handling on the previous night.

The following is the genealogical tree from Sultan Zakria downwards:—

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Population.

Leading families—The Mianas of Mianwali.



The three branches are known as Chiragh Ali Khels, Muradwand Khels and Ghaus Ali Khels. The two important men in the last generation were Mian Sultan Ali and Mian Ali Nur, son of Mian Muradwand. The former represented the eldest branch and acquired great influence in his time. He was shot by his eldest son, Sardar Ali. Mian Ali Nur represented the spiritual side of the family, and used to sell amulets and breathe on the sick (*dam darud*). The present heads of the three branches of the family are Mian Abbas Ali, Mian Fazal Ali, and Mian Fatteh Sher.

CHAP. I-C. — Population. — Leading families—The Mianas of Mianwali.

Another member, Mian Hayat Ali, is zaildar of Kundian. The family is a prolific one and the members are of good physique, but a few excepted, the preference of the majority of them is for a life of dignity and leisured ease.

The family are supposed to be Sheikhs, but have at various times made claims to be regarded as Qureshis and as Sayyads.

Other notable families.

Among other notable families is a family of Kazilbash Pathans, which came from Persia originally with Nadir Shah, and whose ancestors held high positions for some time at Kabul. One of this family, Allah Wardi Khan served in the Kabul campaign, in which his brother was killed, and at the time of the Mutiny he was Ressaldar of the 17th Irregular Cavalry and distinguished himself in a dashing attack on some mutineers of the 9th Irregular Cavalry whom he came up with near Leiah, and whose leader he slew with his own hand. In 1862 he was granted a *jagir* in lieu of his pay as Commandant. He bought lands also at Hazara in the Bhakkar Tahsil, and here the present representative of the family, his son Sardar Muhammad Akbar Khan, a retired Ressaldar-Major, who has himself a long record of good service, resides, and has been appointed an Honorary Magistrate. The family numbers a great many distinguished soldiers among its members, past and present.

The most important Biluch family in the district is a Jaskani family, of which the present representative is Fazl Hussain Khan, zaildar of Sial in the Bhakkar Tahsil. This family is a younger branch of the descendants of Mir Ahmad Khan, an elder branch of which was the Jaskani family that ruled over Leiah and Bhakkar in the seventeenth century, and which, under Muhammad Khan, was eventually overthrown by the Serais in 1789.

Another interesting family, whose traditions were long connected with the Jaskani and subsequent rulers of Mankera, is that of the descendants of Diwan Ladda Ram, who, when in the service of Biluch Khan, Jaskani, is said, according to one version of the story, to have been sent to Lahore to call in the Sikhs to aid Biluch Khan, with the result that Jhanda Singh and Ganda Singh established Biluch Khan at Mankera with Diwan Ladda Ram as his Wazir, a post which he also continued to hold under Fateh Khan and Muhammad Khan, the Jaskani successors of Biluch Khan. Diwan Manak Rai, the son of Diwan Ladda Ram, played a part in the later history of Mankera, and is said to have helped Nawab Muhammad Khan in ousting the Serais from Mankera in 1792. He and his sons after him subsequently got

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into trouble by opposition to Ranjit Singh, and their emoluments and honours were confiscated. The present representative of the family is Diwan Tharia Lal, a grandson of Diwan Manak Rai. He holds a respected position in Bhakkar, where he is an Honorary Magistrate and member of the municipal committee. He has also been Sub-Registrar, but is now advanced in years.

Primogeniture.

The rule of succession by a single heir in each generation has been declared under the Descent of Jagirs Act to apply to the *jagirs* of the Malik of Kalabagh, the *jagir* of Allah Wardi Khan, Rissaldar, the *jagir* of the successors of Nawab Sir Ghulam Hussan Khan, K. C. S. I., the *jagir* of the successors of Hayatulla Khan, Saddozai, and the *jagir* of the successors of Khan Muhammad Khan of Isa Khel.

Religions.

Table No. 16 of Part B gives statistics showing the number of persons of either sex belonging to each of the various religions which are represented in the district. The distribution of every 10,000 of the population by religion is given below:—

Hindus	1,064
Sikhs	143
Jains	1
Muhammadans	8,788
Christians	4
Total ...	10,000

The population of the district is mainly Muhammadan, nearly 88 per cent. belonging to that religion.

Twelve per cent. profess the Hindu religion in one form or another. These are for the most part confined to towns and large villages, and live on trade or money lending. The number of Sikhs is small. They are mostly Labanas living in the Bhakkar Tahsil. The Jains belong to the shopkeeping class and reside only in the towns, Kalabagh having the largest number of them. Native Christians are not many. There is a small settlement of converts at Sheikh Mahmud in the Isa Khel Tahsil, which consists practically of the members of one family.

Muhammadans—Sunnis and

The majority of the Muhammadans are Sunnis. All the Pathan clans, excepting a small settlement of Shiah Kazilbash Pathans in the Bhakkar Tahsil, are very strict Sunnis and very particular in the matter of prayers, fasts, etc. They have a great hatred of the Shiahs and Rafzis. An orthodox Pathan regards *tazias* with the greatest repugnance The influence of Sunni Governors too seems to have led to the very general profession of the Sunni faith by the bulk

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of the mixed Jat population, though the Biluches have as a rule adhered to the Shiah faith. The greater number of the Kachhi Jats, though professing one or other of the two faiths, care little for the distinction between Sunni and Shiah, and though a large proportion of them are regular in repeating the daily prayers, very few make any pretence of keeping long fasts, in which point they differ from the Niazai Pathans and Awans of the upper part of the district. Sayyads have an hereditary tendency to become Shiahs; though some of them profess to be Sunnis, for fear of alienating their Sunni disciples. Most of the Sunni Sayyads, except in the Pathan tracts, are in the habit of constructing *tazias*. They say their forefathers did it.

The Wahabi religion was started some years ago at Paniala across the Indus, but is unsuited to the Muhammadans of this district, who repose great faith in shrines and in the efficacy of pilgrimages to groves and high places. All classes of the people also put great faith in spells and charms.

Pirs and *murids*.

Beyond his *nimaz* (prayers) and *roza* (fast), the ordinary Muhammadan, whether Shiah or Sunni, knows little about his religion, but he always has a *pir* or preceptor, whose *murid* or disciple he is, and whatever the *pir* bids him do, whether the commands relate to matters religious or secular, he is generally ready to do it. It is not uncommon for *pirs* to interfere in judicial cases, and the more ignorant classes have such blind faith in their *pirs* that they will sometimes even confess at their bidding to offences which they never committed, in order to screen the real culprit. The *pirs* visit their *murids* at least once a year, or the *murid* may instead visit the *pir*.

Ziarats and *jhangis*.

The tomb of every *pir* is a *ziarat*, and the more famous the *pir*, the larger is the number of pilgrims to his *ziarat*. These pilgrimages are made at specified times.

In Bhangi Khel, spots where a violent death, such as murder, has occurred are treated as *ziarats*, at which people pray and ask for boons.

Trees or clusters of trees, called *jhangis*, under which a *faqir* is known to have lived for some time, are also held sacred to that *faqir*, and no one dare touch a branch of such trees. Stories are very common of persons, who, on daring to do so, have come to a violent end.

The Hindus.

The Hindus of this district are less particular in the matter of caste prejudices and observances than down-country Hindus. Most of them will drink water that has been carried in *mussaks* (skins for carrying water), or out of *lotas* detached from a working

The Hindus.

well. They habitually ride on donkeys, and do a multitude of other things which an orthodox Hindu would shrink from. All idolatrous observances are kept very much in the background. Except a few small images (*thakars*) kept in their *mandars*, they have no idols at all. Nor is it the habit for them to take about their gods in procession. No one, in fact, ever sees anything of their worship. They burn their dead, and throw the ashes into the Indus. They always keep a few of the bones, and take them, when a convenient opportunity occurs, to the Ganges. Often, instead of taking these bones themselves, they send them by the hand of a friend, who may be going on his own account. The Hindus here profess to reverence certain families of Gosains and Shahs, but these always complain that their disciples in the present day are very slack in furnishing contributions for the support of religious establishments. The Hindus are mostly divided into Sikhs and *Sewaks*. These Sikhs are not Sikhs in the strict Punjab sense, but they reverence the *Granth* and are followers of Sikh *Gurus*, who take the title of Shah, such as Honda Shah, Gurdit Shah. The *Sewaks* reverence Gosains or Bairagi Sadhus.

In marriage and other ceremonies the Hindus for the most part follow the Brahmanical rites.

The Arya Samaj.

During the past few years the Arya Samaj sect, founded by Swami Dayanand, has come into vogue, and many educated and partially educated Hindus have joined the sect. It is an unitarian form of Hinduism, which dispenses with many formalities, and permits much laxity in the observance of exclusive rules. The sect is confined so far to the towns.

Kartaris.

A new religion was started in this district some years ago, but seems to have practically died out. Its members called themselves Kartaris or Kaltaris. Their *pir* and his immediate disciples painted their faces in beautiful spotted patterns and wandered about with fans in their hands. They had an objection to speaking and remained perfectly mute when interrogated. They were ready, however, to accept alms. They were originally Muhammadan cultivators, but were converted to the new faith in consequence of a miracle performed by the founder of the sect, Asa Ram of Bhakkar. One member of the sect still exists at Bhakkar.

Bhagat Panthis.

There is a sect peculiar to the Isa Khel Tahsil, called Bhagat Panthis. The sect was founded some fifty years ago by Bhagat Basti Ram, who compiled a Gobind *Shastar*, for the guidance of his followers, in Gurmukhi. The authority of Guru Nanak's Granth is also admitted by the sect. The main feature of the creed is that a prayer, composed by the

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Bhagat, must be recited six times a day facing the east with the Muhammadan genuflexions, the words Hari Ramji, Hari Gobindji, Vishan Bhagwanji, being repeated. Ablution is a necessary preliminary to prayer, as in Islam. The sect allows marriage within the *got*, and the only ceremonial is a procession accompanied by a distribution of sweetmeats. The Hindu ceremony of *jhand* is not observed, but the sacred thread may be worn, though this rite is to be performed at the Durbar Sahib at Amritsar. There are no funeral ceremonies. The dead are buried and not burnt. A dying man is seated like a *jogi*, and after death the corpse is either carried in a litter to the *samadh* or sacred tomb, or else thrown into a river. The family reads the Granth for ten days after a funeral, but all other Hindu observances are forbidden. Widow remarriage is prescribed as a duty. Idol worship is forbidden, the sect being Nirgun Upasak or worshippers of formless God, and opposed to the Sagun Upasak, or worshippers of God incarnate. The sect believes in the transmigration of soul. The followers of the creed are known generally by the name of Ram Nimazis, which is a nickname given them by their opponents, owing to their worship of Ram in the form of Nimaz. The creed is confined to the Kirars of Isa Khel, Kalur, Trag, and Kamar Mashani. The founder, a practically illiterate Arora, was opposed to the Brahmans, and being a man of strong personality, wanted to found a sect of his own, which he succeeded in doing. He believed in one God and the Muhammadan system of prayer, which he saw daily, appealed to him more than the crude worship of the degenerate local Brahmans. This accounts for the peculiar form of the observances inculcated by him. His followers are perfect vegetarians. The Brahmans persecuted and excommunicated him.

The Sikhs.

The Sikhs follow the Granth and grow their hair, like other Sikhs in the Punjab.

The Jains.

The Jains are followers of Parasnath and differ little from the Jains of the Central Punjab.

Low caste tribes.

There are certain low caste tribes that have no religion to speak of and eat things generally considered unclean. Sweepers are divided into two classes—Kutanas, who observe the rules of the Muhammadan religion as to food, etc., and rank as Muhammadans, and the ordinary Chuhras, who eat anything and profess to be Lalbegis. Kehals and Ods are wandering tribes who eat fish, lizards, or anything they can catch. The Ods are professional *beldars* and take up jobs of roadmaking, etc.

Shrines—

The following are some of the more important shrines and ombs in the district :—

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Ramkund is an ancient shrine in a palm-grove on the eastern face of the Khisor Range, about three miles south of Kundal in the Isa Khel Tahsil. There are three small springs or tanks (*kunds*), of which Ramkund is the largest, surrounded by some buildings. The story is that the place was visited by Rama, Sita, and Lakshman during their exile, and has since been held sacred to them. The buildings are of recent construction, but the place appears to be of great antiquity and in olden times, it is said, was visited by pilgrims from long distances. A fair is now held there once a year on Sheoratri in the month of January, and about 2,000 people assemble to bathe in the tanks. The rooms, which surround the tanks, are said to have been built by a *faqir* named Bawa Sital Das in 1870. The Bawa lived at this secluded spot for twenty years. The place is now uninhabited, except at the fair time or when an occasional pilgrim visits it. It is a weird but picturesque little spot, quite out of keeping with the rugged hills in which it is situated. The water of the springs is brackish and not drinkable.

Khangah Mian Maluk.

Mian Maluk, a saint who was an Isa Khel, was buried about 150 years ago at a place on the hillside two miles south of Kundal. People visit the shrine every Thursday, particularly during the month of *Chet*, when as many as 1,000 people visit the shrine during the month. These come largely from Marwat. A *Mujawar* or keeper tenants the place. The western door of the shrine remains closed, and it is said that no person has power to open it, but that it opens of itself at the time of the fair, whenever the saint wishes. This door is called *Bihishti Darwaza*, or the Gate of Paradise, and when it opens, hundreds of people pass through it.

Bhagat Basti Ram's *samadh*.

West of Kalur village is a *samadh* where Bhagat Basti Ram the founder of the Bhagat Panthis or Ram Nimazis, as they are called, is buried. Attached to the *samadh* is a *dharmsala* which he built. He was very keen on digging ponds and constructing other works of public utility. His disciple, Pokhar Das, looks after the place. A fair is held here in *Katik* on a day called *Mirag chhori*, and the Hindus of Isa Khel town and many other places congregate there. The fair is a recent institution, which has already become one of the largest fairs in the tahsil.

Pir Adal.

A *faqir* named Pir Adal died some 40 years ago and was buried inside the town of Isa Khel, where a *khangah* (shrine) has been built. It is visited every Thursday by people from all parts of the tahsil, especially during the month of *Chet*. This *faqir* is said to have been *majzub* (insane) and to have gone about stark naked. There are many stories prevalent about his superna-

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tural powers; for instance, that he often crossed the Indus without the help of an inflated skin, a feat which the volume of water and strength of the current is considered to render impracticable for the ordinary person. He kept a herd of cattle, the remnants of which still roam about in the jungle and pay occasional visits to the cultivated fields, where they are allowed to graze unmolested to their heart's content. No one dare drive them away or seize them for fear of the saint's wrath. Among them are cows and buffaloes. No one tries to milk these. It is said that certain persons once venturing to do so found that they gave blood instead of milk. The herd is known as Pir Adal's herd.

Shah Abdul Rahman's tomb.

The tomb of Shah Abdul Rahman lies at the foot of the Maidani Range near Mitha Khattak village. Shah Abdul Rahman is said to have been a Sayyad sage who visited this spot about 200 years ago. Being at a loss for water, he fixed his staff in the ground and a spring at once appeared at the spot. The spring still exists and supplies sweet water to a streamlet, which runs down to Mitha Khattak, whence all the neighbouring hamlets draw their drinking water. When the sage died, he was buried there. A fair is held annually on the first Thursday in *Chet*, which is attended mainly by people from Marwat. The water of the spring is credited with curative properties.

Sheikh Neka's shrine.

The shrine of Sheikh Neka is about a mile east of Malla Khel village beside the Baroch torrent. Sheikh Neka, it is said, settled here about a century ago, but, being annoyed by his neighbours, he uttered a curse which turned the water of the torrent from sweet to brackish. An annual fair is held here in *Chet*. The saint's descendants now own land in Malla Khel village. It is a popular belief that clouds, which appear on the top of the ridge, where the tomb is situated, invariably bring rain, which is to say, that clouds from the north-north-west bring rain.

Samadh of Naga Arjan.

Out of the ancient ruins on the Mari Hill, known as Maniot, two small temples still stand in a more or less preserved condition. A *faqir*, named Naga Arjan or Naga Uddhar, is said to have done his penance on this hill long ago. The people can give no date. At his death he was cremated and his remains were deposited in one of the ancient temples, while those of some other *faqir*, probably one of his followers, were interred in the other one. Since then the Hindus of the neighbourhood have made pilgrimages to the *samadh* of Naga Arjan. The Kalabagh and Mari Hindus have great faith in the supernatural aid given by the *faqir* in times of need. A fair is held there on Baisakhi day every year. The place used to be in charge of Bairagi

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Sadhus, who had a *thakurdwara* outside Mari at the foot of the hill. They built a mud hut near the *samadh* and made it into a Hanuman temple, but the Bairagis have died off and their residence and *thakurdwara* have disappeared. The offerings are now taken by some Sanyasis, who have a Shiva temple at Mari.

Khangah Hafizji.

The shrine of Hafizji is situated in the hamlet of Wandha Hafizji near Nammal. About a century ago, one Hafiz Muhammad Azim, who came from Shahpur, took up his abode in Bhambranwali mosque near by. He passed his nights in prayer and his days in excavating ponds, of which three specimens still exist. While digging one day, he unearthed some treasure. Mian Gullan, his disciple, who was with him at the time, tried to steal a march on him by secretly removing the treasure during the following night, but the only result of his enterprise was that he fell headlong upon a hornets' nest and was severely stung, an incident which was credited to the Hafizji's supernatural influence. The shrine is visited as a cure for dogbite. Three stones lie near the shrine – of five, eight, and nine seers weight respectively— and the customary offering is an amount of *gur* equivalent to the weight of one of these stones.

Tomb of Makhdum Haji.

The *khangah* of Makhdum Haji is to be found a short distance west of Mianwali town. He was a Sayyad who lived over a century ago. At his death he was buried near the river bank, and when subsequently the river made a set towards its east bank, it was proposed to transfer his remains and those of another saint to a more secure resting place. The remains of the other saint were transferred first and the new grave for Makhdum Haji was prepared. When they went to fetch his remains, from the old grave, they found it empty. They then returned to the new grave and found that, during their absence, it had been closed in and built over. So did the saint dispense with human aid in passing from one resting place to another. The miraculous powers of this saint are famous, and his vogue among both Hindus and Muhammadans is great. He is known by the distinction of '*Tatti dukanwala*', which means 'keeping a warm shop', an appellation suggested by the promptness with which he responds to all appeals made at his shrine.

Khangah of Sheikh Sultan Zakria.

Sheikh Sultan Zakria came to Mianwali with his father, Sheikh Mian Ali, in the 16th century. His father founded Mianwali village. The son is said to have exhibited supernatural powers from an early age. When the father first arrived in these parts, he made a temporary stay at a place called *Mian di mel* on the bank of the river, about a mile north of the present town of

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Mianwali. There he had a dream that he would find a final resting place by taking a boat with all his baggage and letting it float down the river until it should come to land of its own accord, at which spot he would find a permanent home. When he awoke, it only remained for him to secure the necessary boat, which, however, he found a difficulty in doing. His son Sultan Zakria thereupon turned and faced towards Kalabagh, and shouted at the top of his voice, calling upon one Sultan, Mohana, to bring his boat down the river for their use. Sultan, though 25 miles away at Kalabagh, heard the call and answered it by starting down the river with his boat and arriving at his destination on the following morning. The father and son with their chattels were then put on board, and, letting the boat float downstream at its will, were landed by it at a graveyard in the village of Watta Khel. Here they settled and soon after built the hamlet of Mianwali.

The second miracle of Sultan Zakria was that which won him the *gaddi* in succession to his father. Of three sons, Sultan Zakria was the youngest and the father told them that he would nominate none of them as his successor unless he should have worked a miracle. He accordingly arranged to test their powers and took them to the river bank. There he promised to nominate whichever of them should walk across the river without sinking. The two elder brothers refused to face the ordeal, but Sultan Zakria walked across the river and back again on the surface of the water. He then propounded to his brothers the suggestion that, if they followed him, and repeated his name 'Zakri' all the time they were walking on the water, they would succeed in doing as he had done. They consented to try and he undertook a second trip, upon which they followed him. Half way across, while they were articulating, 'Zakri, Zakri', they realized that Sultan Zakria, for his part, was repeating, "Allah, Allah". Asking themselves why they likewise should not put their trust in the name of Allah rather than in that of Zakri, their brother, they imitated his example, but no sooner did they utter, 'Allah, Allah', than they began to sink. Their brother then called upon them to repeat his own name, as he had bid them, saying that their spiritual advancement had not reached a stage wherein they might invoke the name of God. They then returned safely and Sultan Zakria's higher claim to the *gaddi* was thenceforth acknowledged by them.

Many other miraculous deeds are ascribed to Sultan Zakria, among the best known of which are the following. On going

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Shrines—*Khangah* of Sheikh Sultan Zakria.

once to Rokhri to use his good offices in the settlement of a feud, his interference in the matter displeased the Pathans of Rokhri, who planned a practical joke at his expense. One Pathan pretended to be dead. A funeral procession was marshalled and the parents and relatives followed the bier, wailing and weeping. Arrived at the house where the Sheikh was staying, they requested him to read the funeral service, to which the Sheikh assented. The Sheikh accordingly read the *janaza*, and the bystanders watched expectantly for the moment when the holy man should pronounce 'Allah Akbar', when, by previous agreement, it had been decided that the corpse should rise up and confound him. When, however, the service was completed, and the moment for the denouement arrived, it was the gazing bystanders who were confounded. Instead of the dead man springing to life, as they expected, he continued to lie without sign or motion, and when they approached and uncovered him, it was found that he was in very truth a corpse.

On another occasion Sultan Zakria invited all the *zamindars* of the villages around Mianwali to aid in constructing a tank, which is now known as Sultan Zakria's tank and lies north-west of Mianwali town. The *zamindars* agreed, provided that Sultan Zakria would feed them on *halwa* and mutton. He accepted this condition, and at the end of the day's work he procured the necessary food, all ready prepared, by the simple process of spreading his sheet over a *kari* tree and ordering his servants to take from under the tree whatever they found there. Needless to say, they found sufficient platefuls of sweets and mutton to satisfy the large gathering that was present.

Among other miraculous feats, Sultan Zakria is also said to have shifted a wall without the application of material force and to have endowed with life and clothed in flesh the dry bones of a sheep, of which the meat had already been cooked and eaten. By miracles such as these he won great influence and respect in the neighbourhood, and his tomb is still visited by large numbers. His name is frequently taken as an oath, and his shrine is not uncommonly the scene of the settlement of civil disputes, in which one party has bound himself to abide by any statement made at the shrine by the other party. The Mianas of Mianwali are the descendants of this holy man.

Other shrines.

The district contains many other shrines and well-known places of pilgrimage, to enumerate all of which would require too much space, but the following list includes those which are best known, the shrines of Mansa Nath Jogi and of Sheikh Buland Sahib at Paikhel, of Gajjan Shah at Silwan, of

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Tobri Sirkapp at Musa Khel, of Sheikh Tur at Dhok Muhammad Khan, of Mian Nur Muhammad at Manda Khel, of Shah Jamal at Kamar Mashani, of Gul Faqir at Isa Khel, of Bawa Nanun at Kallurkot, of Maulavi Khan Muhammad Sahib at Maibal, of Tayyib Sultan at Kotla Jam, of Pir Ashab at the village of that name, of Sultan Karori Sahib at Chhina, of Sayyad Amiran Shah at Khwawar Kalan, of Haji Hussain Shah at the village of that name, and of Pir Bakhtiyar at Chap Sandi.

Superstitions and witchcraft.

The people of this district, both Hindus and Muhammadans, are very credulous regarding the power of evil spirits to do harm, and put great faith in the efficacy of charms in counteracting such evil influences. This is why the *pirs* and *faqirs* are enabled to obtain such great influence among them.

Casting out *jins*.

The superstition most prevalent concerns the capacity of persons, and especially women, to become possessed by *jins* or evil spirits. The puzzling disease of hysteria no doubt led originally to the idea of a woman becoming possessed by a *jin*, but now every woman who suffers from hysteria, epilepsy, sterility, and other similar derangements, including even neuralgia, rheumatism, and paralysis, is regarded as harbouring a *jin*, and the treatment in such cases takes the form of casting the *jin* out. This process is a most exciting one, so much so indeed, that it is very common for women, who are suffering from no disease at all, to pretend to be under evil influences, in order to justify them in visiting a shrine and going through the process of casting out the *jin*. Men, no less than women, are supposed to be possessed by *jins*, when they are really suffering from chronic diseases. The process of casting out a *jin* is as follows. The patient's head is first washed and the hair is anointed with scented oil. Properly dressed, the person attends a specified place, where musicians are in waiting. Incense is burnt and music is played, the drum being beaten in a manner peculiar to the occasion. The patient then begins to shake his or her head, and violently swings it round and round, keeping tune with the drum, until he or she drops exhausted. By this procedure the *jin* is supposed to have been expelled for a time only, but not for good, and the performance has again to be repeated, coupled with offerings at the shrine, where it takes place, after the lapse of more or less definite intervals. The excitement and violent shaking of the nervous system may do some good to the hysterical patients, but much of the good done by the process is also no doubt effected in the manner of a faith cure.

Dam darud.

Dam means 'blowing' and *darud* means 'reading from a sacred book'. Persons suffering from diseases visit a *pir*, who reads verses from the *Koran* or *kalams* from some other sacred

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book, and blows on the affected part of the body, if the disease is not a serious one. If the disease is serious, a knife blade, or a piece of stick, or a twig is passed several times from the diseased limb to the ground, while the *kalam* is being read. The operator also blows on the limb from time to time. At the end the knife or twig is stuck into the ground, or lines are drawn on the ground with it, a process known as *jharu*.

Nails are sometimes driven into a block of wood, or tree, in order to remove toothache. At Swans in the Mianwali Tahsil there is a tree, which is visited by countless people for this purpose, and which is studded with nails, driven into it by sufferers of dental agony.

Phulls and *gandas*.

The *pirs* and other holymen drive a roaring trade by selling charms called *phull* and consecrated thread called *gandas*. The former consist in charms written on paper, which is folded and sewn up in cloth, or sometimes placed in a silver amulet. It is then worn round the neck, or arms, or on the head, or by women in their hair. These charms either fulfil the same object as a love-philtre, or else they are intended to ensure success generally, or in some particular undertaking. They are also used as a cure for ailments, varying from headache to sterility. A special form of charm, called *Madhani da phull*, is used to augment the outturn of butter. It is tied to the churn and this is supposed to have the effect of attracting the butter from neighbouring churns. On the river banks it is customary for the women to go early in the morning to the riverside, and churn milk with their churns placed neck deep in water. This enhances the effect of the charm.

Gandas are made of cotton, or silk thread, palm leaves, or gut. The holy man ties a certain number of knots in the charm, reading sacred verses as he does so. The *ganda*, so fashioned, is believed to be efficacious in curing or preventing diseases in any part of the person round which it is tied.

Sehar.

Sehar means ' magic,' but the word is used for a process resorted to in order to ascertain the cause of certain troubles or ailments. A child is seated in a room, from which light is shut out. A lamp is lit and with the aid of this the child is asked to look at a charm written on a piece of paper, while the operator reads certain *kalams*. After a while, when the child has been got into a mesmeric state, it begins to talk incoherently, and is then questioned on the particular matter regarding which information is desired, and gives replies accordingly.

Jadu.

The practice of using spiritual forces for inflicting bodily harm is dying out, but many stories are prevalent concerning the feats performed by various gifted men. A family of Qureshis in

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Superstitions and witchcraft.

the village of Dillewali are said to have practised black magic of the worst type until quite recently. Among other rites practised is that in which pins are stuck into an effigy made of rags, which represents some enemy. *Kalams* are read and the effigy is buried in an obscure place. This is supposed to produce some disease in the body of the person concerned. If the effigy is buried in a grave, this is regarded as causing the death of the effigy's exemplar. Credence in the powers of those, who still practise magic of this sort, is on the wane; nevertheless, it still exists and resort to these performances is a not uncommon way of attacking an enemy. More common still is the type of witchcraft, the end and aim of which is to cause a split between husband and wife, to gain a divorce for the woman and a subsequent alliance with her paramour. The usual method in these cases is to prepare a charm composed of hairs from the woman's head and bits of the man's *chaddar*.

Beliefs about snakes, etc.

Strange beliefs are current among the people, which relate to all manner of matters of common occurrence. These are too numerous to detail, but, as an example, the superstition may be recorded, which is very frequently heard, that to kill a snake is a perilous deed, for any one who kills a snake is sure to die from the bite of another snake within a year.

Ecclesiastical administration and Christian Missions.

There are no Christian Missions with headquarters or branches in the district. The district contains no church. The Christian communities at Bhakkar and Kundian are periodically visited by a Church of England Chaplain from Kohat.

Occupations.

Table 17 of Part B gives details of the occupations registered at the census of 1911, both in the case of workers and dependents. More detailed figures will be found in Tables XV and XVI of the Punjab Census Report of 1911. The district being entirely agricultural, the occupations of pasture and agriculture (including dependents) naturally account for a large proportion of the population, amounting in fact to 63 per cent. It is not possible to differentiate between pasture and agriculture with any degree of accuracy, inasmuch as in the Thal, where grazing is most ample, it is usual for one man to combine both a pastoral and an agricultural means of livelihood though one is always regarded as subsidiary only. Few of the other occupations call for special mention. Weavers form a considerable class. Their womenfolk share a considerable portion of the work, and hence the number of female workers is larger than in any other industry, except agriculture and the occupation of cooking. The weaver women prepare the warp and reel the thread for the woof. Ginning and spinning cotton are also

favourite pursuits of women of all classes in their leisure hours. Corn grinding for payment is also done by women of the poorer classes. Among the *maliars*, who are growers of vegetables, the women do more of the work than the men, the marketing of the produce falling entirely within the sphere of their duties. Fans and mats of *pattha* leaves are largely made by women, especially Piracha women. Labourers are employed in considerable numbers on the railway, at the stone quarry near Swans, and at the salt pits at Kalabagh. Agricultural labourers are in great demand at harvest times.

Food.

The usual custom is to have two regular meals a day, one in the forenoon, the other in the evening. The women share all food with their male relations. The remnants of each meal are generally preserved and eaten cold. In the working seasons men will eat four times in the day. The staple food in the riverain tract is wheat. *Bajra* is not much grown and is very little eaten in this tract. Sometimes barley is eaten. The morning '*rotivela*' or meal time is about 8 A.M., but later in the case of Hindus. The evening food is taken after dark. Both meals consist of *chapatis* of wheaten flour. In the morning *lassi* or buttermilk is generally taken with them. If *bajra* is eaten it is generally taken in the form of *khichri*, that is, mixed with rice and *dal*. In the uplands, especially the hilly and submontane tracts, much *bajra* is eaten during the winter months, while wheat and barley are eaten in the hot weather. Turnips form a common article of diet throughout the district and are eaten both boiled and uncooked. They are frequently adopted as a regular course of diet, to induce health and vigour. Vegetables are procurable only where there is sufficient irrigation. As a substitute for vegetables, young gram leaves are sometimes eaten during the spring. Onions are also a favourite vegetable. In the Thal milk forms an important item in the diet, camel's milk included, but the peculiar food of the Thal consists in the water-melons or *titak*, which are consumed in vast quantities during their season both by man and beast. The seeds of water-melons are also ground into flour, after being dried, and made into *chapatis*. The Thal people also eat the fruits of the *jal*, *kari* and *jand* trees, an unattractive diet, which their arid surroundings have forced on them, and to which habit alone has inured them. In the Bhakkar Tahsil dates are consumed in considerable quantities, and to gorge dates is a common enough pastime. Meat is eaten on festival days, or when an animal is at the point of death and is killed in anticipation. The bigger *zamindars*, however, often eat meat daily. In the Thal even dying camels are sometimes killed for food.

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Population.
Dress.

The common dress of the agricultural Jat population consists of a shirt or *chola*, a loin-cloth or *manjhla*, wrapped round the legs with the ends tucked in at the top front, a sheet (*chaddar*) thrown over the shoulders, and a turban called *patka*. These are all, as a rule, made of the common homespun cotton cloth, but imported cloth is coming more and more into fashion, especially for the turban. The *chola, chaddar* and *patka* are always white, the *manjhla* often blue, but the tendency is to substitute white for blue in the case of this article also. The Thal people often wear a checked *lungi* in place of the ordinary *manjhla*. The *patka* is twisted in a wisp loosely round the head in a very slatternly way.

Of the Pathans, the Niazais dress very much like Jats, wearing the *manjhla*, but the more respectable men wear loose baggy trousers, drawn tight about the ankles, called *shilwar*, and some of them still wear the *andrakkha*, a tunic tied up in front by means of thin straps stitched on to it. The Khattaks, including Bhangi Khels, wear slate-coloured clothes from head to foot, which are very much in keeping with the rugged dusty hills, where they live. The Bhangi Khels generally wear a *shilwar*, to which a weird appearance is given by its being drawn tight at the ankles in front only, the back being left to hang loose. The *chola* or *kurta* is generally long and baggy and a short waist-coat is worn over it. An *andrakkha* is worn instead of the *kurta* by the poorer people or by the old fashioned. The turban is tied in the Pathan fashion. A *chaddar* is invariably thrown over the shoulders or tied round the waist when on the move. The well-to-do wear a peaked cap or *kula* with a Peshawari *lungi* round it as a turban and a similar *lungi* round the shoulders.

The Khattaks living along the foot of the Maidani range wear *manjhlas* instead of *shilwar*, and are looked down upon in consequence by the Bhangi Khels for their adoption of a Jat custom. Further, they do not adhere rigidly to the slate colour, but wear black and white very largely.

The Sarhangs of Sultan Khel and Bori Khel have a peculiar dress of their own. They always wear a black *manjhla* and a black turban with a white *kurta*, and over their shoulders they throw a black *chaddar* or *lungi* generally with a red edging.

The Biluches dress in the same way as Jats, but some of them wear *shilwar* instead of the *manjhla*.

In the matter of shoes, the Khattaks, including Bhangi Khels, wear leather sandals called *chaplis* and sometimes also use grass shoes. The same is the case in the Salt Range. *Chaplis* are some-

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times ornamented with gold or silk thread embroidery. In other places the ordinary Punjabi shoe is worn, the Pothowari shoe with a sharp pointed toe being in chief demand. In the south of the district the round tipped Derewal shoe with silk embroidery is common. When walking, shoes are often removed and carried on the back or even on the head, and when crossing a river on an inflated skin, the shoes are tied at the top of the bundle of clothes which is carried on the head.

Dress of Hindus.

Under Muhammadan rule Hindus were not allowed to wear turbans. They were restricted to the skull cap, and this is still a common head-dress among them, but the turban is now worn without restriction. A few Hindus wear the usual *dhoti*, but the usual garment for the lower half of the body is a white *manjhla*, but differing in this from Muhammadans, they pull one of the lower ends through the legs and tuck it up at the back. The *chola* or *andrakkha* is worn round the upper half of the body and the *chadar* is indispensable.

Extra clothing.

In the cold weather a thin woollen blanket (*dhussa*) is often worn by all people alike, while Pathans also wear *posteens*, or sheep skin coats, and *chogas* which are a kind of dressing gown.

Among the more educated and respectable of both creeds, waist-coats and coats of different designs, made of Kashmir or broadcloth, are commonly worn.

Dress of women.

The usual dress of the women throughout the district consists of a *choli* or bodice, a *manjhla*, and a *bhochhan*, which is a wrap thrown over the head. Some Jat women wear a *ghagra* or petticoat instead of a *manjhla*. Loose trousers called *sutthan* are worn by Khattak and Niazai women, and also by the women of the Awankari, and the weaver women of Mari and Kalabagh. These take the place of the *manjhla* and reach to the ankles, and are combined with a long bodice, called *kurta* or *chola*, which extends to the knees. The Hindu women do not differ appreciably in dress from the Muhammadan women. They have a preference, however, for the *ghagra*, which is generally of a red print.

Women mostly remain bare-footed and shoes are a luxury for them.

Methods of wearing the hair.

Both Hindus and Muhammadans wear their hair long, down to the shoulders, and grease it freely with oil, made from *ussun*, which they consider cooling and strengthening to the brain. Hindus all grow beards and are often hardly to be distinguished in appearance from Muhammadans. The Muhammadan, however, clips the moustache, while the Hindu lets it grow free. An exception to this is found in the Magassis, a Biluch tribe in the Thal, who think it wrong to clip either beard or moustache.

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The Khattaks keep their heads shaved, but retain tufts of hair above each ear. Women wear their hair in four different ways according to their time of life. When small girls, their front hair is cut straight across the forehead, and the back hair is allowed to hang loose. This fashion is called *chhatti*. As the girl grows up, her hair is plaited on each side of the forehead, the plaits being called *mendhian*. The unplaiting is a solemn ceremony, which takes place at marriage. After marriage the front hair hangs loose and the back hair is plaited into a tail, the front hair being called *dhari* and the tail *gutt*.

Ornaments worn by women.

The following ornaments are considered essential for every married woman and are always worn :—

Hassi—A silver crescent-shaped ornament with ends bent back, worn round the neck. The ends are often covered with leather or cloth to prevent their catching the hair.

Laung, *kanda* or *chargul*—A gold umbrella-shaped ornament worn on one side of the nose.

Kangan—Silver bangles worn on each hand.

Churan—A broad silver bracelet worn on each wrist behind the *kangan*.

Verh—A bracelet worn instead of the *churan*. It is made by twisting silver wire several times round the wrist.

Buhatte—These consist of three or four square pieces of silver, connected by a thick silver cord, and worn on the upper part of the arms.

Takhti or *Larkani*—These are larger square pieces of silver, often engraved, and worn round the neck, strung by a long silk cord.

Chilkan—Simple silver ear-rings. Sometimes as many as twenty are worn in each ear, a separate hole being bored for each.

Vale—Large ornamental ear-rings, worn one in each ear, and suspended through a hole in the centre of the ear.

Challa and *mundri*—Are respectively plain rings and rings set with one or more stones. These are generally of silver.

Trore—A sort of chain bracelet, worn below the ankles.

In addition to the above there are other ornaments which are sometimes worn and which include :—

Patri—Two gold square angular lockets, held together with silk cord, which are hung from the plaits on each side of the forehead.

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Hamel—Four or five lockets and pendants of different shapes, hung from a silk cord, and worn round the neck.

Anguthe—Plain silver rings worn on the thumbs.

Vali—A large silver ring with three gold knobs and worn as an ear-ring.

Challe—Flat-topped silver rings for the toes.

Kubba—A hollow knobby silver ornament with pendants fixed on to the centre of the *choli*.

Tukma—Small silver pendants fixed on to the ends of the *choli*.

Davani—A gold ornament worn across the forehead.

Bainan—A gold pendant suspended to the centre of the forehead.

Lurke—Pendants hanging from the lobe of the ear.

Bunde—Ear-rings with small pendants.

The two last named are not worn after marriage.

Dwellings.

Both townsfolk and villagers generally live in mud huts with flat roofs. Each hut consists of a single room, which is occupied by the whole family. There is generally a separate shed for the cattle. As the family increases, one or two similar huts are added to the original building. These huts are called *kothas*. In the Kachhi, huts with mud or grass sides and covered over with a moveable roof of *munj* grass or matting are common. These are called *salh* or *chhappar*. In those parts of the river-bed, which are most exposed to floods, people generally live in what is called a *kulh*, a large piece of grass matting put up in the form of an arch, with the two ends touching the ground. In the Thal hamlets, the people make rude huts out of wattled grass and *khip* called *dhara*. In the winter they house the cattle in holes dug into the sandhills.

A *pakka* house made of bricks with an enclosure in front is called an *haveli*, and a double storied house is known as *mari*.

A rustic house generally has in front of it a small courtyard, partly or wholly enclosed by a mud wall, or a fence or wall made of grass matting. A rustic house usually consists of one room about 25 feet long and 12 to 15 feet broad. The only opening is a single door in the centre of the front wall. It is therefore customary, particularly among Pathans, to bore a hole through the shutter just below the outside chain and, when the door is closed for the night, the chain is pulled in and tied inside, to prevent the inmates being locked in by thieves, who wish to remove the cattle, or by other miscreants.

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Population.

Furniture.

Inside the house a number of *kalhotas* or earthen cylinders are ranged for the storage of grain, clothes, and other odds and ends. These are closed with covers called *chapur*. Smaller cylinders are known as *bolhara*. A rectangular clay tank, called *sakari*, is sometimes used for the same purpose. Over the *kalhotas* or *sakaris* is placed a basket, called *taungar*, or *khara*, which holds the best clothes of the family. In the back wall facing the door, there are generally one or two ornamental niches, called *jale*, and shelves, called *parchhattis*, fixed into the wall over wooden pegs. On these repose the *dabla*, a small round box for ornaments and toilet requisites, and one or two *sarposhes*, which are covered trays for sweets and other eatables. Here also are placed plates (*thalis*) and the best of the hardware used for serving the food.

The beams of the roof are always supported by wooden props, even when they are large enough to rest on the walls, and across the props is tied a wooden pole, from which the cradle (*pinghura*) is hung. The cots of the family, called *khatra*, are arranged against the back wall, and between them is placed the grinding stone (*chakki*) and its circular trough (*ghand*). At the other end of the room are kept the lighter agricultural implements, such as the *karahi*, rake, and the *trangal*, pitchfork, the bullock harness, comprising the *trangar*, rope net, the *thara*, cushion saddle, and the *chhatt*, a double bag; here also are kept the quilts (*sirak*) and other winter clothing of the family. The drills (*nali*) are generally stuck into the roof, and the *charkha*, spinning wheel, and *chhajla*, winnowing basket, are kept in some corner, when not in use. Inside the front wall lie the *matti*, an earthen pot for churning milk, the *madhani*, churning stick, the *chappa*, a wooden receptacle for buttermilk, the *singul*, a wooden ring for retaining the churning stick in its place, and the *netra*, the leather thong of the churn. Elsewhere in the room are to be seen one or two water pitchers (*gharra*) with their stoppers (*dodan*), cooking utensils including *katir*, earthen kettle, and *degra*, metallic kettle, a *tawa*, baking plate, *sanak*, earthen troughs, a *bathla*, earthen cup, and a *daori* and *danda*, pestle and mortar. In the centre of the room is a pit about 2½ feet square with a raised edge, which is used as a fire-place, and an iron tripod in the centre of it holds the food. The other articles, which complete the household paraphernalia, are a *huqqa*, a small churning stick (*jhaggna*), a few bundles of twine made of *munj* for repairing the cots and called *wan*, some muzzles for bullocks hung on a peg, a few baskets (*chhakir*), and possibly a stand placed on a shelf or in a niche for the *Kuran*.

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Outside the room there is a platform, which is sometimes covered in for shelter. This is the regular cooking place, and the *chullh*, stove, is built at one end. A *gharwanji* or stand for keeping pitchers is placed here, and there is also a tree branch, the thick end of which is fixed in the ground and the smaller branches cut down to stumps. The thick part is used to tie the churning apparatus to during churning, and the milk vessels after being cleaned are hung on the stumps to dry. This is called *ni*. Every hearth also contains a *dabra*, a clay stand on which pots taken off the fire are placed, and a few *kuzas* or jugs. Every peasant likes to have a tree in his courtyard, and when a tree can be grown, it is looked after with great care. Ploughs (*hal*) and yokes (*panjali*) are hung on this tree, as is also the baby's cradle, when necessary. Poor people sometimes have to share their residential room with their cattle during the winter, but this is done from necessity and not from choice. The feeding troughs, called *khurlis*, are built outside in the courtyard.

Disposal of the dead—

The Muhammadans bury their dead: the Hindus (except the Bhagat Panthis) and the Sikhs burn them: the Bhagat Panthis either bury them in a sitting posture, or throw the corpse into the river.

(*i*) Burial customs of Muhammadans.

The burial customs are briefly these. In the case of Muhammadans, the grave is dug by one of the three menials, the blacksmith, potter or carpenter. It is dug north and south, and when a certain depth has been reached, a niche is made to the east, called *sami*, for receiving the body. The priest prepares the shroud of white longcloth and bathes the dead body. He takes away the clothes last worn by the deceased. He then reads the funeral prayers (*janaza*). A cotton or silk cover is placed over the body and it is carried on a cot. Friends and relatives sometimes place valuable clothes on it. The priest then reads the *darud* and *kull* prayers, and all present forgive the deceased for any wrongs which he may have done them. The coffin is then carried, the pall-bearers first taking seven steps to the west and then proceeding to the graveyard, usually accompanied by the friends of the deceased. The body is laid with the head to the north and the face turned westwards. The shroud is buried with the body, but the cover and other pieces of cloth thrown over it are given to the grave-digger, or, if valuable, they are taken by the heirs who pay the grave-digger a recompense. The grave is filled up and water sprinkled over it. Two stones, one at each end, are set up in the case of men, and a third in the centre is added in the case of women. In some tracts, however, instead of the third central stone, the graves of women are distinguished

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by the stones being made to face east and west instead of north and south. After the burial the relatives and friends retire, while the priest, standing on the grave, calls aloud the call to prayers, and reminds the dead that when the angels Munkir and Nakir come to ask him his God, religion and prophet, he should say 'Allah, Islam, and Muhammad,' in reply. He then joins the other mourners and receives his fee. The party finally returns home and partakes of some rice or sweets before breaking up.

On the third day the *kull khwani* takes place. The relatives, friends, and neighbours assemble and feed at the expense of the deceased's heirs. On the next Thursday and six following Thursdays the Kuran is read. On the last Thursday friends, sometimes other people also, are fed by way of charity. A custom peculiar to the Khattaks is to serve old butter (*ghi*) on this occasion. It is specially preserved by being buried underground, and among the families of note it is considered a great distinction to feed people on *ghi* which is thirty or forty years old. Lumps of this *ghi* are spread on *chapatis* and the dish is greatly relished by the guests, though to those who do not appreciate the honour, the odour of the *ghi* is apt to overpower other considerations.

Full mourning lasts only until the third day, when the son of the deceased goes through the performance of *dastarbandi* or tying a turban, and is recognised by the brotherhood as his father's successor. As regards the burial expenses, the amount spent in alms to the priest is often prescribed by the dying man himself, but it is improbable that his heirs would obey his injunctions did he name too large a sum. The burial expenses of children and women are much less than those of an adult male. The amount spent varies with the status and substance of the deceased, and ranges from rupees 10 to rupees 100 as a general rule.

(ii) Hindus.

At the death of a Hindu the relatives give the body a bath and carry it to the crematorium on a wooden plank, on which the body is retained by three pegs on each side. The body is there burnt. All those accompanying the funeral bathe and return to the deceased's house. One of the sons shaves his head and performs *kirya*, the after-death ceremonies. The friends and relatives assemble every evening and keep watch for ten nights, a lamp being kept alight day and night. On the day after the cremation they go again to the crematorium, to burn up any parts of the body which may have been left unburnt. On the fourth day the bones and ashes are collected and thrown into a river, a few bones being preserved to be sent to the Ganges. The same evening the brotherhood assembles at the deceased's house and the reading of

Disposal of the dead—(*ii*) Hindus.

Garur Puran is commenced and continues for six days. On the tenth day the lamp is thrown into the river. On the thirteenth day the *dastarbandi* of the eldest son takes place in presence of the brotherhood, who all present one rupee each by way of *tambol*. Some of them present turbans also. On the death of a young man, *tambol* is not presented. On the morning of the *dastarbandi kirya* is performed, and the priest receives dresses, cash, jewellery, and other articles according to the status of the deceased. On the fifteenth day a feeding of the Brahmans takes place. The mourning lasts for thirteen days. On the anniversary of the death a ceremony called *khiah* takes place, at which the Brahmans are fed.

Amusements—

The people of the district are fond of games and sports. In default of gun licenses, dogs are often kept for baiting jackals and pigs, and the coursing of foxes and hares is also indulged in. Hawks are kept by a few. The most popular forms of sport, however, consist in tent pegging (*n zabazi* or *chapli*), and a game called *doda*. This game, which outdoes tent-pegging in popularity, is essentially a young man's game. Sides are made up and preliminaries arranged, much as in prisoner's base. Next a youth goes out some forty yards towards the centre of the arena, where he turns and faces a pair of youths of the opposing side. He is then pursued by this couple, who endeavour to catch and throw him, while he aims at striking them alternately on the breast as they near him, and effecting his escape at the same time. As he has to face in a different direction to that in which he is running, in order to effect this, his task is an exceedingly difficult one and in the majority of cases he fails to achieve it. When a skilled player, however, does defeat his two opponents, his achievement is always rewarded with prolonged applause from the enthusiastic crowd. It is not counted as a score if he slips in between his two pursuers. Heavy falls often occur at this game, as the pursued and pursuers race at full speed, and as often as not they charge headlong into the surrounding crowd. The players are naked, with the exception of a loin cloth, and some very fine specimens of manhood are often seen among them. This game is played throughout the district, and in some of the larger villages regular gatherings take place, at which champions from long distances come to display their prowess. The names of the champion players are well-known far and wide, and when a pair of players has attained to a certain degree of reputation, they will generally refuse to accept a challenge from any other pair, which public opinion does not regard as a match for them in skill.

Doda.

Dances.

Dancing is popular throughout the district. In the Bhakkar Tahsil the favourite dance is called the *dhris*. It consists of a

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circle of men who dance round one or more musicians standing in the centre. The movements vary from slow to rapid, and are accompanied by a great deal of clapping of the hands and shuffling of the feet. The dance is a somewhat doleful one, but both performers and onlookers become very enthusiastic over it.

The Khattak Dance.

The Khattaks perform a dance on a large scale round a bonfire, in which as many as 200 men sometimes take part. Even elderly Pathans join in, yelling at the top of their voices. The dance begins slowly, but as it proceeds the performers warm to their work, until gradually both musicians and dancers reach a stage of wild excitement. The piper and drummer begin to dance as they play, and each performer picks out another from the circle and the two vie with each other in the fury with which they twirl and whirl and brandish their arms and the swords which they carry. The bonfire is constantly fed with oil and fresh wood and throws a lurid glare over a most weird scene. The drummer is a most important contributory to the success of the show, which depends mainly on his skill, and the Khattaks will often refuse to dance, if the drummer is not good enough. The dancers continue to spin at the top of their speed, and when they stop for a short interval, individual performers come forward and display dexterous feats of sword play. The dance is followed by a feast, at which sheep are slaughtered, and the mutton is roasted and eaten on the spot.

Other sports.

Weight lifting is a common trial of strength among men, large stones or part of the trunk of a tree with a handle excavated therein being used for the purpose. Wrestling is not much practised except among boys. Swinging is another favourite pastime. At Kalabagh swimming is a popular exercise during the summer. When the river is in flood, people float down it for miles on inflated skins. The Kalabagh people also take outings in large sailing boats, in which they cruise up and down all day long on holidays with drums and music on board, and in the evening they return to a feast of *dodhi halwa*, which is a noted dish cooked at Kalabagh in a peculiar manner. During the spring and autumn the netting of quail is a favourite occupation, and in the Kachhi round Mochh and Kamar Mashani during the month of March the young men turn out after crane (*kunj*), this being the season when these birds are returning from the hills. They go out by moonlight, when the *kunj* have settled down in the bed of the river for the night. The spot having been previously marked at sunset, one man stalks quietly round, while the rest of the party await on the opposite side, each holding in his hand a long cord, to which is attached an iron or lead ball. This weapon

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is known as *sah*. The stalker drives the birds, which fly low over the heads of the party, who fling the balls up into the flights, so that the cords become entangled in the necks or wings of the birds. Large bags are often obtained by this means.

Gatherings, at which *dohras* are sung, are also much frequented. A poet sits in the middle of a circle and sings for long periods at a time, while half a dozen young fellows sometimes join in and sing to the accompaniment of an ordinary pitcher or *gharra*, from which a peculiar drumlike sound is elicited by striking its aperture with the palm of one hand. Another local instrument is an earthen pot with a membrane tied over the mouth and a string fastened into the membrane, on which a few small bells are tied. This instrument is called a *lota*. It is held under the left armpit, the string being grasped in the left hand, and it is then struck with a small stick held in the right hand.

Gambling is very common, especially among the Pathans of the northern tahsils and in the towns, and takes several forms.

Names and titles.

The Pathan names are generally of Arabic or Persian origin and end in Khan. Association with Jats and the ignorance of Arabic and Persian have, however, resulted in some cases in the adoption of Hindi names combined with the suffix Khan, such as Karak Khan, Samundar Khan. The courtesy title of a Pathan is Khan. Sayyad names end in Shah and Qureshi names generally in Hussain or Ali. The names of both tribes are generally of Persian or Arabic origin, but exceptions, such as Jindwadda Shah, are found. Biluch names are also of Arabic or Persian origin, but in their case the number of Hindi names is larger, *e. g.*, Shadu Khan, Kaura Khan, Mittha Khan. Biluches are addressed as Khan.

Awan names are similar to those of Pathans, but the suffix Khan is in their case of recent origin, and until lately used to be contested by their Pathan neighbours. Their courtesy title is Malik. Among their names are not only Pathan names, which they have come to adopt largely, but names of Sanskrit origin, such as Ujjal Khan. The majority, however, are names like Yar Muhammad, Barkhurdar, which are their own ancestral names. The Jats do not as yet make any great pretension to the title of Khan, and as a rule content themselves with the appellation Malik. Their names are either of Arabic or Persian origin or purely Hindi as, for example, Ranjha, Gahna, Diwaya. Some names are a combination of Arabic and Hindi, as Allah Rakya, Allah Wasaya.

All Muhammadans are accustomed to repeat the names of

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their ancestors in the family, and a grandson is as often as not named after his grandfather or great-grandfather.

Names and titles.

Among Hindus, the Brahman names generally end in Lal, Ram, Chand, or Dyal, but never in Das, the first name being generally that of some incarnation (*avatar*). They are addressed as Missar, *e.g.*, Missar Gopal Lal.

The names of Aroras and Khatris end in Ram, Das, Chand, Dyal, Bhan, Lal, and Jas, and they are addressed as Chaudhri, Shah, Malik, or Diwan, the last two titles being confined to certain families. A couple of families of Brahmans in Bhakkar are known as Gosain. Sikh names end in Singh. A number of priestly families descended from a common ancestor combine the titles of Singh and Shah, *e.g.* Honda Shah Singh, Gurdit Shah Singh. The courtesy title of Sikhs here is Bhai, there being no Sikhs big enough to be called Sirdars.

Contracted names.

Names are usually contracted among Muhammadans, especially Jats, and, in such case, generally end with the letter 'u.' Examples are Dadu for Allahdad, Sheru for Sher Muhammad.

CHAPTER II.—ECONOMIC.

Section A.—Agriculture.

CHAP. II-A. — Agriculture. — Area of cultivation. Soil classification.

Table 18 gives the surveyed and cultivated area in acres for the district and the three tahsils in the year of settlement 1906-07. The percentage of cultivated to total area amounted to 16·2. Subsequent annual variations in the cultivated area will be found in Table 1.

The classes of soil adopted for assessment purposes throughout the district at settlement were :—

Chahi—Land irrigated by wells only.

Sailab—Land receiving moisture from the river.

Chahi sailab—*Sailab* land irrigated by well or by lift from river or a creek.

Nahri—Land irrigated from a canal.

Nahri sailab—*Sailab* land irrigated from a canal.

Abi—Land irrigated from perennial hill-streams.

Barani—Land depending on local rain only.

Acreage statistics of each class are included in Table 18. *Chahi* and *barani* lands occur in all the tahsils, in tracts above the high bank : *sailab* and *chahi sailab* are confined to the riverain tract. *Nahri* and *nahri sailab* are peculiar to the Isa Khel tahsil : and there is a little *abi* in both the northern tahsils.

(*i*) Mianwali and Isa Khel Tahsils.

In these two tahsils, with the exception of the Kacha and the Nahri circles, the greater part of the cultivation is *barani*, which includes several separate kinds, that show very marked differences one from another. These kinds into which the class is therefore sub-divided are :—

Kasledar—Land which receives the drainage water of higher lying waste, besides its own rainfall.

Naledar—Land which receives hill-torrent water.

Maira—Level land consisting of any admixture of good loam and sand depending upon its own rainfall.

Tibba—Sandhills containing a slight quantity of clay and fit for growing only water-melons or gram.

Sam or hail Level and rich loamy soil in the hills, receiving drainage water from the surrounding hillocks.

Dog or rakkar Clayey soil with a sub-soil of gravel or stone.

Guyan—Stiff poor pebbly soil on a slope.

Gor or Gar—Stiff poor soil full of stones, hardly culturable with profit.

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Soil classification—
(i) Mianwali and Isa Khel Tahsils.

Of the above, *Sam*, *Dog*, *Guyan* and *Gor* are terms used in Bhangi Khel. *Hail* is met with in the Khudri. *Naledar* and *Kasledar* are found in the Pakka Circles, while *Maira* and *Tibba* are general.

Naledar soil is usually stiff and heavy, having been hardened by copious flooding from the hill torrents. It takes a lot of labour in building and maintaining the embankments which are necessary in order to arrest the rush of water from the hill torrents. The water-supply is a great advantage, particularly as it brings down a certain amount of silt washed down from the hill-side and results in enhancing the outturn ; but at the same time the land is good for nothing, until it is thoroughly soaked with water, and, therefore, a light local shower of rain does it no good. These lands are met with at the foot of the hills in each tahsil, where the water flowing down from the hills is within easy reach. Further away from the hills comes the similar soil, which cannot get the advantage of flooding from the hill torrents, but is nevertheless too stiff to produce a crop on purely local rain. This is called *Kasledar*. A part of the land, usually two-thirds, has therefore, to be left alone in order to collect rain water, and this is drained on to the remainder (*i.e.*, $\frac{1}{3}$) which is intended to be brought under cultivation. In the course of a few years, all the fine silt gets washed away from the catchment area, which consequently becomes exhausted. And yet part of this very land has to be brought under cultivation as, on level ground, the cultivated bit rises higher and higher with the accumulated washings of the neighbouring waste, until it becomes impracticable for water from the waste area to rise up to this part. This results in a sort of rotation. Towards the south of each tahsil, away from the hills in Mianwali and close to the southern end of the Maidani range in the Isa Khel Tahsil, lies sandy land known as *Maira* which has enough of fine clay in it to enable successful cultivation. The sand retains moisture and a light shower enables ploughing and sowing, owing to the softness of the ground. This soil is suited principally for gram and moth, but the better pieces can grow a very decent crop of wheat or *bajra*. *Tibba* is the name given to sand-hills occurring chiefly in the southern portion of the Mianwali Pakka, which are not quite useless for agricultural purposes, but are with repeated light showers of rain capable of raising gram and *jamaun* (*Eruca Sativa*) and the cheap crop of water-melons. *Hail*, *Rakkar* and *Gar* are peculiar to the Khudri Circle. Between the small hillocks, there are low-lying flat pieces of ground which receive drainage water from the neighbouring hills and can, with a little trouble in blocking up the outlets, retain all the water so received. These are the best lands in the circle. A very

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Agriculture.

large proportion of the land is, however, *Rakkar*, which means a light soil with not a very deep stratum of clay. *Gar* is the poorest soil, which has plenty of stones in it, and is as difficult to plough as it is deficient in the outturn of crops. *Naledar Kasledar* and *Maira* are also to be found in this circle. In the Bhangi Khel, level lands, whether on the top or at the foot of a hill, are called *Sam*. If embanked, the land is called *Sam Ghandi*. It is practically the same as the *Hail* of *Khudri*. *Rakkar* is called *Dog* in Bhangi Khel and *Gar* is termed *Gor*. *Guyan* occurs in this hilly tract alone as it is only here that slopes of the hills are broken up for cultivation. At the extreme south of the Bhangi Khel Circle, where the *algadas* (water channels) are very full during the rains, the water is diverted to flat pieces of land by means of *ghandis* (dams) and the land is regular *Naledar*.

Soil classification— (*i*) Mianwali and Isa Khel Tahsils.

(*ii*) The Indus Valley.

The soil of the Indus Valley is composed of alluvial deposit. Land is classified almost entirely on its productive powers by the people themselves. But land with a marked admixture of sand is known as *retli*, with sand near the surface as *dramman*, and when covered with a coarse grass as *drabhwali*. The good soil enriched by silt deposits is called *mattwali*: *gas* or light loam is also recognized. Land, the surface of which has been hardened and furrowed by the passage of floods, is known as *sar*. But these are all modifications of the same soil. As the whole area undergoes a gradual process of destruction and renewal, no permanent classification is possible. No large block of one class of soil exists. The difference in productive power is due to the relative thickness of the alternate layers of sand and silt and the proximity of the former to the surface.

The Indus Valley contains no real *barani*. Nor does the rainfall directly affect the area sown. It does, however, considerably affect the area matured and the outturn. Owing to the small rainfall its receipt in season is of the greatest moment. In years showing an average fall its unseasonable character has often led to complete failure. It should be noted that the average rainfall steadily decreases as the Indus flows southwards.

(*iii*) The Thal.

In the Thal the whole of the tract is very sandy and the chief distinction lies between sand which is almost entirely void of loam (*thadda*), and soil which contains a small admixture of loam (*tatta*). The former, which characterizes the Thal Kalan, bears no crops without a plentiful supply of manure, but holds water well, and is consequently better suited for the production of light grasses and rain melons. The *tatta* soil of the Daggar, on the other hand, will produce crops in its virgin state without manure, but it soon wears out, and manure becomes here also a

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Soil classification—(iii) The Thal.

necessity of cultivation. The better soil of this class is sometimes known as *gas*, while that which is too hard to cultivate is known as *rapper*, or when covered with indurated sand, as *sikror*. Bottoms (*lak*) bearing *barani* crops are called *paili*, sand hills (*tibba* or *man*) when they bear melons are called *vari*.

Systems of cultivation—

The following accounts of the systems of cultivation, sowing and harvest times, agricultural operations and implements, manuring, and double cropping, in the different tracts of the district are taken from the assessment reports of each tract.

(i) Mianwali and Isa Khel Tahsils.

The average cropped area per well is only 7 acres in Mianwali and 5 in Isa Khel. The well lands are worked usually by Malliars (akin to Arains) who make good use of manure and raise two or three crops off the same field. *Abi* cultivation is also very insignificant, representing only ·3 per cent. of the cultivated area in Mianwali and ·1 per cent. in Isa Khel. The lands are seldom manured and are treated similarly to ordinary *barani* lands, except in years of drought when they are ploughed with the help of the spring water. The real advantage of the *abi* lands lies in the crops being helped to maturity by two or more waterings and in the assurance that water is available for ploughings and sowings in the event of failure of rains. The most important class of cultivation is *barani*, taking up 73 and 77 per cent. of the total cultivated area in the Mianwali and Isa Khel Tahsils respectively. The easiest to work are *maira* lands, where gram and *moth* can be sown without any previous ploughing and wheat is often put down after one ploughing. The proper procedure is, however, supposed to be to break up the lands in May or June, to plough it again in August and September, and then to prepare it finally with a third ploughing in October, just before sowing wheat. Two or three ploughings are also considered necessary for *bajra*. *Kasledar* lands, when consisting of heavy *ratti* soil, take more ploughing, and *Naledar* lands demand still more labour, except when the hill torrent water leaves a rich deposit of silt. *Hail* and *sam* lands have similarly to be ploughed up oftener, sometimes 5 to 7 ploughings being considered necessary. Manure is never used except on fields immediately adjoining towns and villages, as the Pathan or Awan considers it *infra dig.* to carry manure to his field. The treatment of lands is most careful in the Bhangi Khel and in the small cis-Indus settlement of the Bhangi Khels known as Banni Afghanan, but some of the *Hail* lands in the Khudri Circle are also very well attended to, and some lands flooded by embankments erected by the chief of Kalabagh in Massan are delightful to see. The greater part of the *barani* cultivation is, however, anything but careful, owing

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Systems of cultivation—(i) Mianwali and Isa Khel Tahsils.

obviously to the capricious nature of the rainfall. In a year of drought, the peasant cannot feed his cattle and when, later on, a timely fall of rain enables him to plough up his lands, he has usually lost his bullocks. He therefore makes the best he can of a bad bargain and fearing that the favourable rainfall may not recur, ploughs up as much land as he can drive his bullocks through and puts in as much seed as he can raise. He then sits down leisurely and waits for timely showers of rain to bring his badly sown crops to maturity. Regular rotation of crops is seldom resorted to. Ordinarily, when a landlord has enough land, he divides it into two blocks, sowing one with *kharif* and reserving the other for *rabi*. After the land has been worked thus for some years, the arrangement is reversed. In smaller holdings, however, so much depends upon a timely fall of rain that, whenever possible, *bajra* is sown after wheat, in which case the field has to be left alone for two harvests and is sown again with *rabi* in the third. With favourable summer rains people sow as much *bajra* as they can and, in the case of failure of rains in summer, all available land is sown with *rabi*, if there is enough rain in September or October or even in November or December. There can be no double cropping on fields sown with *bajra*, because, by the time the crop is off the ground, it is too late for *rabi* ploughings. Moreover the idea is that *bajra* saps up all the nutrition from the soil and wheat cannot grow on the field until it has had rest. So a second crop can only be raised when *jowar* is cut green, or when the *kharif* crop has failed and can be removed in time for *rabi* ploughings. Moreover abundant rain sometimes enables gram or *taramira* to be sown on lands which have grown an indifferent crop of *moth*, *til*, etc.

About one-fourth of the cultivation in Mianwali and 15 per cent. of it in Isa Khel is *sailab*, depending on the floods of the river. As would naturally be expected, the *rabi* is the more important harvest in the riverain tracts. Some *bajra* and *jowar* are raised on higher pieces of land, which do not get inundated, and *mash* is sown as a late summer crop, when the floods subside. The land has to be ploughed 4 or 5 times for wheat and sometimes as many as 10 or 11 ploughings are necessary, to get rid of the weeds. Wheat and barley are the principal *rabi* crops. There is a certain amount of double cropping, wheat and barley being raised off fields sown in the *kharif*, with *mash* and other crops. Here, as elsewhere, no manure is used except on lands adjoining villages or hamlets. The Jat peasants take plenty of trouble with their *sailab* lands, but it is very difficult to

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Systems of cultivation—(i) Mianwali and Isa Khel Tahsils. (ii) Bhakkar Tahsil. The Indus Valley.

induce any of the landowners to sink wells or set up Persian wheels on creeks in order to water their fields till the crops are matured. The dread of the river carrying away lands and the trouble of working a Persian wheel are enough to influence the decision of the lazy, easy-going cultivator.

In the Indus valley of the Bhakkar Tahsil, the unit of cultivation is the well or *jhallar*, though in some villages separate holdings of pure *sailab* lands are common. All the wells are aided by the river.

The Pakka Circle depends for its irrigation on the flood water dispersed over it through the two channels of the Audhana and the Puran. Both these are old beds of the river. The former lies under the left bank or *dhaha*. The latter may be considered the dividing line between the Kachcha and Pakka Circles. The flood in the Audhana keeps to the one channel, but is held up at various points by small *bands*. The Puran under its various names pours its water into a number of small channels. Both on the main channel and its subsidiaries small irrigation dams are erected. These dams are, throughout the Indus Valley, often neglected after one or two years of high flood. But much depends on the annual meetings to discuss irrigation matters and the proper direction of these meetings by the officials in charge. For the whole tract the years of medium flood, allowing of percolation without too great surface moisture, are the best. *Soma* is rare except in such artificial cultivation as the gardens and Powah wells of Bhakkar. Estates lying between the two main irrigation channels suffer from *kallar*. The only remedy for this is a fresh deposit of silt. Some villages have also suffered from the passage of floods, which have left a hard furrowed surface behind them.

Not only is the well a unit of cultivation but an ensample of the whole system in use. By describing the operations of the year on an ordinary well holding and its adjoined flood lands, a fair idea of this system may be obtained. The agricultural year begins on the 16th June. Clearance of new lands however will have been made during the previous winter. Agricultural labourers are engaged during the end of June or beginning of July. The usual calculation is one man to each yoke on a well, and if the owner or cultivator's family are insufficient, labourers are engaged. In July the floods begin to fill the many channels. There is usually sufficient moisture from percolation to plough. Otherwise the well is put into use and the land watered once and ploughed. The ploughing is followed by manuring, which on well lands is only limited by the quantity available.

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Systems of cultivation—(ii) Bhakkar Tahsil. The Indus Valley.

On the average well the custom is to divide the well area into three or four plots. Of these one is cultivated in rotation for the *kharif* and the remainder for the *rabi*. This *kharif* plot receives the manure. In addition cattle of all kinds are folded on well lands from the 15th October to the end of December. Though all manure is usually devoted to the well lands some is occasionally given to a *sailab* plot near the farm buildings or the well. After manuring the land is given two more ploughings and water, if there is too little moisture present. Large clods are broken with a rough roller or clod-crusher. The seed is thrown broadcast on the well lands and sown with a drill on the *sailab*. After sowing the land is harrowed and rolled flat to retain the moisture. By the middle of August all *kharif* crops have been sown. During September the *rabi* ploughings are carried out and manure put in if possible. The wheat lands are ploughed from four to six times, and for other crops three to four times at intervals of a few days. During November the *rabi* is sown and the *kharif* crops harvested from the middle of the month. After December sowings for the *rabi* are useless. November wheat is the best, though liable to suffer from *mula*. Wheat needs one watering a month. Other crops get it when water is available. During November the well *adds* or courses are banked up, and the larger grasses, which are used as fodder, are removed. But if noxious weeds are detected further weeding is necessary. Rain is hoped for at the end of December. A shower or two at the end of February serves to swell the grain in the ear. Reaping begins about the 10th April. Gram will have been harvested earlier. As the sheaves are cut they are taken daily to the stack at the threshing floor. Threshing and winnowing go on till the 15th of June, on which date the agricultural year finishes. The *sailab* lands are ploughed once or twice: some fodder crops are merely sprinkled in the sun cracks. No attempt is made to weed them and the crops are left unheeded to ripen. Wheat usually on wells, and occasionally on *sailab* lands, is grazed down at least once. Beyond the system of manuring already described no recognised method of rotation exists. The *dofasli* area is large and contains on the wells a proportion of *zaid* rabi crops, such as tobacco, onions, garlic, &c. These are sometimes grown in the area of wheat cut for fodder, but as often in the area occupied by the barley crop, which is largely used as fodder, or on the land used for turnips. The wheat lands are also used for *bajra* in the *kharif*, as the well channels are already prepared. In practice wheat is sown as often as possible, unless the land shows signs of weakness. Fair land is expected to carry *bajra* or *jowar* in the *kharif*

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Systems of cultivation—(ii) Bhakkar Tahsil. The Indus valley.

every second year. On some wells half the well area is cropped twice every second year. Turnips are used to prepare for the *kharif*. The leaves are used as vegetables and the root mainly as fodder up to the end of January. The *kharif* crop is usually sown on well water and ripened on flood. The *rabi* depends on the moisture from the floods for its sowing and ripens by aid of the well. The average area per well or masonry *jhallar* in the Pakka Circle is about 16½ acres. Of these nearly 15 acres are matured in the *rabi* and the remainder in the *kharif*.

Well cultivation in the Kachcha Circle amounts to 3 per cent. only of the matured area of the circle. It is on exactly the same system as in the Pakka Circle. But the area per well is less and the proportion of more valuable crops is also smaller.

Of the *sailab* area 25 per cent. is cropped in the *kharif*, 9 per cent. is under *til*, 5 under *bajra* and 4 under *jowar*. The rest are miscellaneous crops grown for fodder. Of the 75 per cent. under *rabi* crops wheat occupies 44, gram 9, barley 5 and peas 8. The rest is fodder, including 2 per cent. of carrots and turnips. A few melons are grown as the *zaid* rabi crop. There is no real rotation of crops. New lands are usually sown with peas, *samukha*, &c.; in the second year gram, and sometimes barley, are sown. These are followed by wheat which is continuously cropped until the soil shows signs of exhaustion. If this occurs the cropping is varied back to peas and other fodder crops. *Sailab* plots near a well or hamlet sometimes get manure. Otherwise manure is not used. The system of cultivation is primitive. As little ploughing as possible is done. Weeding is unheard of. The cattle used are miserable. In the main the Kachcha Circle is inferior to the Pakka. The constant uncertainty of their prospects leads to haphazard methods of cultivation. As soon as the wheat crop is garnered many of the villages are deserted. The inhabitants move off with their cattle to the higher villages till the floods subside. During the floods a few miserable families may be found perched on platforms or the roof beams of their huts. Their physique is decidedly inferior to that of the inhabitants of the Pakka villages. These again are inferior to their neighbours of the Thal.

(iii) The Bhakkar Thal and Daggar.

Whether for the purpose of grazing or of agriculture the soil of the Thal Kalan is as a rule inferior to the Sandal Bar, and certainly bears no comparison with that of the Karana Bar in Jhang, or the Bar in Shahpur and Bhera Tahsils. As regards the lands more immediately adjacent, it is inferior to the Mianwali and Khushab Thals, though the higher spring level makes well cultivation more feasible. But as regards well cultivation it

Systems of cultivation—(*iii*) Bhakkar Thal and Daggar.

must be remembered that throughout the whole of the tract the well owner is dependent to an unusual degree on the rainfall. The well crops mature very imperfectly on irrigation only. The Thal grasses are so ephemeral that they literally spring up in one rainy season, and have disappeared almost entirely before the next rains are due. The failure of one summer or winter's rains therefore may mean the loss of a great number of stock, and in such cases the well owner, unable to import fodder from the Kachhi for his cattle, and deprived at once of manure for his crops, and of the *ghi* and wool which generally bear part of the heavy expenses of well cultivation, either closes his well altogether, or cultivates only such fodder crops as will keep his cattle alive. Another natural feature with which the well owner has to reckon is the '*lu*,' a hot wind which, in the Thal Kalan especially, very frequently dries up the *rabi* crops just as they are maturing, and blows with such force during August and September as to make it difficult to grow any *kharif* crops, except those designed merely for fodder. Another factor is manure ('*pi*' or *ahal*). Without manure cultivation is unprofitable on the best lands, and impossible on the rest. The dung of sheep and goats ('*mengan*') is better that that of cattle, but even that of camels, though full of deleterious salts, is used when none other is obtainable except in the salt lands of the southern Thal. The dung of Powindah camels is preferred. Manure is simply thrown on the land before ploughing; top dressing (*chanan*) is not practised.

There is much art in the choice of a Thal well site. In the high Thal a site is usually chosen in the pocket between two ridges, and if possible at a point where the downward slope will give the well lands drainage from all three sides. In the Daggar, a ridge (*khes*), thrown out at a tangent from the well, serves to drain the surface water to the *amla*. On the spot thus chosen the well is plotted out with all the regularity of an old Dutch garden. The courses (*adds*) radiate out from the cylinder (*pui*) in rigid straight lines, and the cross courses at right angles present a geometrical scheme not unlike that of a spider's web. The main *adds* are V shaped and lined with clay. Leading out of the *adds* on either side are the minor courses (*naukar* or *uri*), and on either side of each *naukar* are three to five irrigating plots (*kiari*). Those on both sides of the *uri* taken together are called a *naukar;* those on one side only form a *pakki*. The number of *kiari* varies with the firmness or looseness of the soil. The systems followed in dividing a well are somewhat intricate, as the division made for purposes of cultivation frequently differs from that made by subdivision of ownership. The cultivating unit is the *nigal*.

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Systems of cultivation—(iii) The Bhakkar Thal and Daggar.

Wells, of which the actual or nominal strength is six or more yoke, are usually divided into three *nigals*, and those, of which the strength is four yoke, into two. Each *nigal* has its own fallow and its own cultivation, independent of the others; in some cases it consists of a single block of land, but in a large number of cases it consists of two blocks, one on each side of the well. Thus, if a well consists of three *nigals*, each *nigal* would contain two sixths (*cheanga*) on opposite sides of the well. In order to secure an equal division of the well water among the *nigals*, the day and night are each divided into four watches (*pahar*) of three hours each, and each *nigal* has a turn of so many watches. These are marked off by the shadow from a staff by day and on moonlight nights, and on the darker nights, by the movement of the larger stars; the turns are kept strictly, and no compensation is made for time lost owing to accidents. They are changed on Friday, in order to equalize the division of day and night. For purposes of ownership, various systems of division prevail, but even in dividing ancestral shares, there is a tendency for the division to range itself into halves and thirds, in order to maintain the cultivating unit.

The maintenance of a Thal well involves as much labour and nicety as its construction. As shown above, each cultivating unit or *nigal* has its own fallow and its own rotation. Fallowing, except in the small wells near the Powah, is given systematically. The practice varies but little. Looking at a well, for instance, in March, it would be seen that a full half of each *nigal* bears wheat and barley, the staple crops, the other half being fallow. As soon as the wheat is cut, a small part of the stubble land, usually that nearest the well, is planted with tobacco and vegetables (April-May); another part of the same land is planted with cotton (May); a further part with autumn crops (July-August). These crops, which are on the ground till January at latest, occupy most of the land which was under wheat; the remainder of the wheat land, lying furthest from the well, is left fallow. The second half of the *nigal* has meanwhile lain fallow all the summer, the sheep and well oxen having been quartered on it for the sake of the manure. This fallow receives its first ploughing (*si*) during the rains, and a small part is sown with turnips in October, the rest with wheat in November. The ordinary period of fallow is thus from January to November, but the land furthest from the well (*sirana*) gets double this period, as it is not sown with an autumn crop. In the Thal Kalan, where there is little *kharif* cultivation, the proportion of land lying fallow is of course larger. Ploughing for the wheat crop

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Agriculture.

Systems of cultivation—(*iii*) The Bhakkar Thal and Daggar.

is carried on immediately after rain has fallen, it being a well-established precept that the land should be ploughed once for every rain that falls, and that ploughing without rain is useless. The land after ploughing is smoothed over with the greatest care, either by the hand rake (*dindali*) or a toothed board (*kaen*) drawn by oxen. The *kiaris* are next mapped out by pegs and string, and the ridges (*thal*) thrown up by hand. The first flushing (*rauni*) is then given, and the seed sown. Much care is taken in selecting the ears (*sitta*) of corn from which seed is to be taken, and the grain is passed through the sieve (*chaji*) to remove the seeds of *bhukal* and other weeds. It is sown thickly and broadcast (*chatt*), being mixed with sand to increase its bulk. The drill (*nali*) used in the *sailab* lands of the Kachhi is not found in the Thal. The method is wasteful, but the people are persuaded that it secures the maximum of crop to the minimum of space; about a maund and a half of wheat or barley is sown to the acre. The number of waterings given varies with the locality. In the Thal Kalan wheat will ripen with three waterings. In the Daggar it needs from four to five. The young wheat is generally grazed down to harden it. The crops are cut by the owners and their hands with the help of chance labour—the *laihar*. The day's cutting is usually carried to the threshing floor (*khalwara*) at once, and the threshing (*gah*) is carried out as soon as possible. In some cases the oxen, in treading out, are aided by a heavy log (*phala*) dragged after them. Winnowing is in most cases done, not by the owners, but by menials, the winnower being called *pona*. The heap of cleaned corn (*dheri*) is as a rule divided by the owners themselves, a weigher (*dharwai*) being employed only in a few of the villages. The grain is stored in big mud jars (*kaloti*): the *bhusa* in a circular erection (*phalla*) of either *kana* or cotton sticks.

The above account refers entirely to well cultivation. As regards *barani* cultivation, it is very largely of the catch crop order. It is of a quite different class to the *barani* in the Shahpur Bar, which is as a rule plentifully inundated by long catch drains. Nothing is done until the rain falls. On the first favourable rain the plough is driven lightly across the land and *moth*, gram or *taramira* scattered by hand in the furrows. No manure is used. If two or three rains fall subsequently there is a crop, otherwise there is none; in any case the crop is a light one. When so much is left to the will of heaven, it is difficult to speak of an "average outturn." A *lak* may

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Systems of cultivation—(*iii*) The Bhakkar Thal and Daggar.

bear a crop two years running, and then bear nothing for four or five years. Quite as important as the crops mentioned above, and in many parts of the Thal even more so, is the cultivation of rain melons (*hindowana* or *teetak* the ripe fruit being *pitta*). These are either sown in the *pailis* in the manner described above, or on the sand hills, which are in this case called *varis*. These *varis* are not measured, and do not find a place in the *girdawari*. When melons are sown on the sand hills the ground is not ploughed, but is scratched with a branch and the seed dropped on to it. If the rains be good, *teetak* grow in astonishing profusion. The fruit is eaten; the seeds (*cheechka*) are ground into flour, and the skin given as food to the cattle and sheep. The growth, however, is very capricious, and one hears a good deal more of melons than one sees of them: but when the crop succeeds, the fruit furnishes the chief food of the people for nearly two months of the year.

Agricultural population.

The population returned at the 1911 census as engaged in agriculture and pasture was 69,777 souls; while the number returned as dependent upon these occupations was 145,303, out of a total population of 341,377. In this connection pasture and agriculture are, in the Thal, where pasture is most important, so closely interconnected that it is not feasible to make any useful distinction as between the occupations of pasture and agriculture.

In addition to those directly engaged in agricultural operations, there are several village menials and others who perform subsidiary tasks connected with agriculture and receive payment in kind out of the common heap, before the landlord and tenant divide the produce on the threshing floor. The most important menials are the *lohar* (blacksmith) and the *tarkhan* (carpenter). The *laihar* (reaper) is also indispensable at harvest time. The potter is engaged where there is well cultivation and is an unimportant menial in the northern tahsils. A certain due is always paid to the priest. The other menials employed in the northern tahsils do not deserve special notice. In the southern tahsil the potter is more important and the *dubir* (weighman), *ponah* (thresher and chaff-shifter) are also generally employed, while the *kotwal* (Lambardar's assistant), *karawa* (crop watcher) and *mohana* (ferry man) have also to be paid in the Indus Valley and the *mochi* in the Thal. The number of menials paid and the rates at which they are remunerated vary from village to village and even

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within one and the same village. In addition to the above-mentioned a labourer called *kasha* is entertained for the purpose of laying water on to the fields in the canal-irrigated tract of Isa Khel.

Agricultural population—Agricultural labourers.

Agricultural labourers are called in during harvesting operations, but in the case of wells, especially in the Bhakkar Tahsil, agricultural labourers are employed permanently. The following remarks, relating to the Thal wells, are taken from the Thal Assessment Report, but are applicable with slight modifications to the whole tahsil:—

"There are few wells which are, or indeed can be, worked entirely by the owners. It is a universal rule that one *beli* (a labourer, either owner or hired man) is needed for each yoke of oxen on the well, up to a maximum of six. The hired labourer is either a monthly hand (*rahuk*) or more rarely, a *lichain* who takes a share of the produce. When a *lichain* is employed the normal rule is that the produce, after deducting all expenses, including seed and land revenue, is divided into nine *lich* of which the "oxen", *i. e.*, owner, take five, and the labourers, including working owners, take four. Where the owner does not recover from the common heap the cost of the seed, there are five *lich*, the "oxen" taking three; but where labour is scarce, as in the Thal Kalan, the labourers take a full half of the net produce, and even, in some cases, of the gross produce, as the owner foregoes any deduction from the common heap on the score of revenue, well-ropes or seed. The wage of the *rahuk* is made up of payments under a bewildering variety of titles. A fairly normal rate is as follows:—*Khada* (food) 32 seers a month, being wheat for six months, barley for two, and other grains for four; a money wage of about Re. 1 a month (*seropa, kiri, kirian* or *rok*), and a lump payment (*mudha*) of three or four maunds of wheat every six months. Sometimes no *mudha* is given, but an increased *seropa*; in other cases a reduced *seropa* is supplemented by a yearly gift (*virsa* or *roti*) of a maund of wheat, or by a fee (*bijrai*) of a maund at sowing time. At the grain rates prevailing in the last twenty years the average cost of a *rahuk* works out at about Rs. 45 to Rs. 50 a year, and account books show that this is the amount which has in many cases been paid. Briefly it may be said that the cost of a *rahuk* is far higher in the Thal Kalan than elsewhere."

Principal crops.

Table 19 of part B shows the areas under the principal crops during each year, both for the district and for each tahsil.

The most noteworthy feature is the large increase in acreage under gram between the quinquennium ending 1905-06 and that ending 1910-11. The increase was from an average of 52,718 acres in the first quinquennium to an average of 84,099 in the second, that is, an increase of 59 per cent. During the three years ending 1913-14, there has been a

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Principal crops—

further steady expansion of gram cultivation as follows:—

	Acres.
1911-12	115,035
1912-13	112,359
1913-14	140,280

This increase has occurred almost entirely in the Thal portions of the Mianwali and Bhakkar Tahsils, the suitability of which for the cultivation of gram has only been realized in recent years by the cultivators.

Rabi crops—

The following are the principal *rabi* crops with the average outturns estimated at settlement in each case. The average area given as under each crop is that of the ten years ending 1910-11:—

Wheat.

Wheat is the most important, not only of the *rabi* crops, but of all the crops sown. The average acreage cropped is 219,216 acres, or 39 per cent. of the total area cropped. At the first Regular Settlement the area under wheat was 57 per cent. of the whole. The decrease has been due partly to the erosion of some excellent wheat-growing lands in the riverain tract, and partly to the introduction of gram as a paying crop on the sandy soil of the uplands. The average outturn per acre on irrigated land ranges from 5 maunds on *nahri* and 6 on *sailab* to 9 on the best *chahi* land. On *barani* land it varies from 2 to 8, the lower outturns being of the Bhangi Khel circle. Both red and white wheat, bearded and beardless, are used. Some care is taken in selecting seed. About a maund of seed to the acre is used. Late sowings at the end of December need more seed. The seed sown with the drill is sown thinner than in the broadcast sowing. The well lands are sown broad cast. Wheat is liable to the attacks of *dhanak*, a disease which attacks and shrivels up the ear; *gudhasa* or *ratti*, which shrivels the plant while sprouting up; and *khana* or *mula*, smut, which seems to be caused by a small green blight. In the Thal the crop is often withered by the *lu* or hot winds.

Gram.

The average area under gram is 68,408 acres or 12 per cent. of the total area cropped. As above mentioned, there has been an enormous expansion in the area under this crop in the Thal during recent years. The average outturn is 5 to 6 maunds per acre on irrigated and 2 to 6 maunds on unirrigated land. The seed sown is about 10 seers to the acre, and sowings last until October. It is sown partly for fodder and partly for grain. It ripens first of the *rabi* crops: the young leaves (*pali*) are sometimes eaten as a pot-herb.

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The average area under barley is 29,533 acres or 5·2 per cent. of the total area cropped. It is sown extensively on newly formed riverain lands. The average outturn is 6 to 6½ maunds per acre on *sailab*, 6 on *nahri*, and 7 to 10 on *chahi* land, while on *barani* it varies from 4½ to 7½ maunds in different circles. The yield is thus little inferior to that of wheat. A large proportion of the barley is grown for fodder. As it ripens some twenty days before wheat, it is of great use as green fodder at a critical time of the year. It is also said to require less water than wheat.

Taramira

Taramira is locally known as *jamaun* or *ussun* and occupies about 3 per cent. of the area cropped. It is sown mostly on light sandy soil, but the seed scattered about the threshing floors is carried away by the wind, and, in years of good rainfall, wild *jamaun* springs up in all kinds of land. It is grown alone or with *mash*, when grown to ripen, and with peas or gram, if it is to be used as fodder. Four to eight seers of seed per acre are used. The average outturn is from two to four maunds an acre according to the circle.

Sarshaf.

Sarshaf (rapeseed) or *sarson*, occupies hardly one per cent. of the total area. The average outturn is four maunds.

Tobacco.

Tobacco is grown on less than one per cent. of the total area. It is grown mainly on wells. The Thal tobacco is supposed to be better than that grown elsewhere. The soil chosen is usually that nearest the well and plenty of manure is used.

Vegetables.

Melons (*tarbuz*) other than water melons grown in the Thal, are grown generally for home consumption, except on lands lying near towns, where they are sold or bartered. The area sown with vegetables is very small, less than one per cent. of the total; those sown include onions, *karela* (a species of small cucumber), cucumber, *bengan*, spinach, pumpkin and well melons. They are grown on land close to the well and are highly manured. In addition to the above, turnips (*gonglu*) are grown systematically on every well for fodder purposes. They are sown about the middle of October. Part of the crop is reserved for seeding and is treated for this purpose in a somewhat peculiar manner. When the plant is full grown, it is pulled up, the root cut in half, and scored with a knife; it is then replanted and left to flower.

Turnips.

Fruits.

The only fruit trees and orchards are confined to the towns of Kalabagh, Isa Khel, and Bhakkar and a few other places such as Kot Chandna. These are of no particular importance.

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Principal crops—Other *rabi* crops.

Other *rabi* crops include peas, *massar*, maize, *chari*, and various crops, used solely for fodder, such as lucerne, *senji*, *maina*, *samukka*, *sanwak*, and *china*. Maize is grown solely as fodder for horses and not as a staple crop. Hemp, rice, indigo and linseed are grown in small quantities.

Kharif crops.

The following are the chief *kharif* crops:—

Bajra.

The average area grown with *bajra* is 91,990 acres or 16·3 per cent. of the total area cropped. The average outturn is from $3\frac{1}{2}$ to $4\frac{1}{2}$ maunds per acre on *sailab* land, 4 maunds on *nahri* land, 5 to 8 maunds on *chahi* land, and from 2 to 7 maunds on *barani* land according to the assessment circle. A certain part of the *bajra* crop is generally cut for fodder. It is sown in July and August on the lands from which the wheat has been lately cut: the land is not ploughed much, but a good deal of manure is used. The grain ripens in October and, while ripening, is protected from birds by women and children on platforms. When designed for fodder only, it is sown much more thickly than when intended for grain.

Jowar.

The average area under *jowar* is 23,420 acres or 4 per cent. of the total area cropped. Its popularity as a fodder crop has somewhat increased. The average outturn varies from 3 to 5 maunds per acre. Like *bajra*, it is sown thick when intended for fodder; in fact, it is very little used as a grain food, and the area grown on wells is small.

Pulses.

The pulses grown include *moth*, *mung* and *mash*. *Moth* is grown mostly on light, sandy, *barani* soil, while *mung* and *mash* are grown chiefly on *sailab* lands. Four maunds per acre is the average outturn for all three crops. *Moth* is very largely grown in the Thal and Daggar for its excellent fodder, *missa bua*. The area under these crops represents about five per cent. of the total cropped area.

Til.

Til (*sesamum*) is very little grown in the northern tahsils and in the Thal, but is a favourite in the Indus valley portion of Bhakkar, where it is almost all grown on *sailab* land. The crop is subject to frequent failures, and the average outturn is $2\frac{1}{2}$ maunds on *sailab*, and 3 maunds on *chahi* lands. It is grown for oil, but the stalks are sometimes mixed with more nutritive fodder.

Cotton.

The area under cotton is very small, being only 3,664 acres on the average, or less than one per cent. of the total area cropped. This is not a cotton-growing district, and the increasing attention

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paid to other crops has resulted in its neglect. It is grown mainly for home consumption. The average outturn varies from $2\frac{1}{2}$ to 5 maunds per acre. A certain amount of *narma* (imported cotton) is grown on wells. The seed of cotton is either used for fodder or sold, and milch cattle do well on it as a substitute for oil-cake.

Sugarcane.

The average area under sugarcane is 69 acres only.

Water-melons.

Water-melons are grown, both in *kharif* and *rabi*. They are grown very largely on waste lands in the Thal, and in such cases are excluded from registration. The seed is scattered generally in *jowar* and other crops. The pulp of the melon is eaten by the cultivators, the shell is used as fodder for cattle, and the seed, if more than the requirements of the next harvest, can be sold, though at low rates.

Extension of cultivation.

The extension of cultivation is shown in table 18 and also in table 1 of part B.

The following figures give the cultivated area, at various periods, in acres, and the increase per cent. in each case :—

			Acres.	*Per cent.*
1879-80	...	...	341,669	...
1901-02	...	...	540,692	+ 58
1906-07	...	...	559,367	+ 3
1911-12	...	...	652,837	+ 17

The figures of the 1879-80 settlement do not, it should be noted, furnish an accurate basis for comparison with the later figures, inasmuch as the cultivated area then included only the area under a crop at the time of measurement, the area that bore a crop in the preceding harvest, and that which was being prepared for, or was likely to be sown with a crop in the next harvest. The present cultivated area includes, what was then returned as *taraddadi* or fallow or as abandoned *banjar*. This tends to exaggerate the increase.

Model farms.

There are no model farms in the district; nor have new varieties or new appliances been introduced to any noteworthy extent.

Working of the Land Improvement and Agriculturists Loans Acts.

Table 20 of part B shows the amount advanced annually as *takavi* under the Land Improvement and Agriculturists Loans Acts. Increased attention has been paid in recent years towards meeting the needs of agriculturists for loans, and fairly large amounts have been advanced under both Acts. In former years advances under the Acts were generally small. The advances taken are repaid with fair promptitude.

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The number of agricultural banks and co-operative societies which exist in the district is small, but those which do exist are for the most part well managed and flourishing. Several agricultural banks were started about the time of the latest settlement. Many of these have since been eliminated, leaving to survive those only in which good and careful management had been available to direct their operations. The prospects of the movement taking a firmer hold and increasing in popularity, though hopeful, have not yet materialized. The following is a list of those now in existence :—

MIANWALI TAHSIL.

	Society.		*Manager.*
1.	Ballo Khel	...	Fateh Khan.
2.	Ghallughara	...	Khan Sultan Khan.
3.	Ghandi	...	Sardar Ahmed Khan.
4.	Jal ...	...	M. Fateh Sher.
5.	Piplan.		
6.	Dher Umed Ali Shah		S. Ata Muhammad Shah.

BHAKKAR TAHSIL.

	Society.		*Manager.*
1.	Chuni	...	Paindu Shah.
2.	Dhandla	...	Ahmad Khan.

Indebtedness of cultivators.

In regard to debt, the remarks of Captain Crosthwaite in his Assessment Report of the Indus Valley Tract are worth reproducing. He writes :—

"The causes of debt in this tract are the ordinary ones. The large holders, of whom there are few Muhammadans, are on the whole fairly well off. The small holders have to contend against occasional failures of crop, but most against their own improvidence. The buying of cattle from Sindhi traders, who are themselves dealing on borrowed capital, is a fruitful source of debt. The cultivator must borrow, and has to pay exorbitant rates of interest. If it were possible to finance his real needs at cheap rates there would be little debt; but there are always a certain number of men incapable of retaining their hold on the land. Partition also amongst the many sons can but lead to eventual disaster, and there are many whose carelessness or whose ill-fortune dip them irretrievably. A murrain on the cattle, the falling in of the well, are sufficient to place a man in the hands of the usurer for ever."

To this should be added that an increased readiness to avail themselves of Government loans, and the changes effected by the passing of the Alienation of Land Act, have helped to improve the cultivator's position as above described.

As a rule, however, the ordinary landowner is inclined to extravagance on marriage, betrothal and other ceremonies, and

Indebtedness of cultivators.

few possess the habit of keeping money by them. If a man finds himself with a surplus, he promptly invests it in the purchase of more land, or bullocks or an extra wife, or else squanders it in litigation. There are also certain causes of indebtedness which are beyond human control. In the upland circles, two or three successive years of drought invariably result in enormous losses of cattle, and plough bullocks have to be bought before agricultural operations can be commenced in a favourable year and the seed has to be obtained on credit. Till lately, advances made under the Agriculturists Loans Act were not very plentiful and the majority of peasants had to make their own arrangements. Again in the Kacha, when a man's land is washed away, he has often to wait for years before the whole or part of his land is alluviated again and meanwhile he has to beg, borrow or steal in order to keep his body and soul together (and often finds the last to be the most convenient *modus operandi*). Let it, however, be said to the credit of the *zamindars* that they are not so dependent on the village *bannia* as people elsewhere are. They will, for instance, generally take their surplus grain for sale direct to the best market, instead of disposing of it at less favourable rates in the village, and there are also men amongst them who are thrifty and provident enough to store grain, etc., against a bad year.

Sales and mortgages of land.

Table 21 of Part B gives full details for each tahsil and for the whole district, relating to sales and mortgages of land subsequent to 1900-01.

The following passage taken from the Final Settlement Report of the district written in 1908 gives information as to the volume of transfers, classification of transferees, value of land, and effects of the Alienation of Land Act. The statistics quoted therein include also the figures for the Leiah Tahsil, which has since been transferred to the Muzaffargarh District :—

" The following table shows the area sold since last settlement :—

—	To *Sahukars.*		To OTHERS.		TOTAL.	
	Total.	Cultivated.	Total.	Cultivated.	Total.	Cultivated.
Area in acres	79,063	36,125	167,230	62,452	246,293	98,577
Percentage	1·6	5·1	3·3	8·8	4·9	13·9

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Sales and mortgages of land.

Nearly 5 per cent. of the land has passed hands by sale since last Settlement, but this includes a larger proportion (14 per cent.) of the cultivated area. This is only natural, as there never is much demand for other than cultivated land. In the Assessment Report for the Mianwali-Isa Khel Tahsils, details of transfers to members of agricultural tribes and others were given, but similar statistics are not available for the Bhakkar-Leiah Tahsils. For all practical purposes, however, the transfers to *sahukars* represent the transfer to others than members of agricultural tribes. The other purchasers of land all belong to agricultural tribes with the exception of menials (*kamins*) who are few and far between. It will be noticed that transfers to agricultural tribes are twice as large with reference to total area as those to *sahukars*, but that the *sahukars* have taken a larger proportion of cultivation. The percentage of total area held by Hindus has risen from 2·1 to 2·8, which appears correct, considering that against their acquisitions of 1·6 per cent., they have sold some of the land held by them at last settlement. These percentages have, however, been worked excluding the Thal *shamilat*. Adding the proportion of the *shamilat* to which they are entitled, they own 8·6 per cent. of the total area. The mortgages outstanding at last settlement are compared below with those ascertained at re-measurement :—

—		Held in mortgage by					
		Sahukars.		*Others.*		*Total.*	
		Total.	Cultivated.	Total.	Cultivated.	Total.	Cultivated.
Last Settlement ...	Area ...	85,202	14,697	160,136	63,770	245,338	78,467
	Percentage...	1·7	3·1	3·3	13·4	5	16·5
Now	Area ...	144,535	68,211	162,682	65,323	307,217	133,534
	Percentage...	2·9	9·6	3·3	9·2	6·2	18·8

The total area mortgaged to *sahukars* has increased from 1·7 to 2·9 per cent., but notwithstanding the large increase in cultivation the percentage of cultivated area held by them in mortgage has risen from 3·1 to 9·6. This is due to the tendency of the *sahukar* to take more cultivated than uncultivated land on mortgage. The mortgages to other tribes have on the other hand increased but little, redemptions nearly equalling fresh mortgages. The increase in cultivation on the whole has therefore resulted in reducing the percentage of cultivated area mortgaged to them from 13·4 to 9·2. The area held on mortgage is shared about equally by *sahukars* and others, the latter having a slightly larger percentage of the total area while the former possess a somewhat higher proportion of cultivation. The percentage of area held under mortgage on the whole is not large, being over 6 per cent. of the total and rather less than 19 per cent. of the cultivation against 5 per cent and 16·5 per cent. respectively at last settlement.

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Sales and mortgages of land.

The Alienation of Land Act has had a salutary effect in checking the sales and mortgages to money-lenders. Forms of mortgages permitted by the Act are beginning gradually to be adopted. In this district, however, the proportion of *zamindars* capable of acquiring land by purchase or mortgage has always been large and lands are redeemed as freely as they are mortgaged. The market for transferable land has not therefore been unduly restricted. The rise in the value of land since last Settlement is indicated in the table below:—

MIANWALI AND ISA KHEL TAHSILS.					BHAKKAR AND LEIAH TAHSILS.				
PERIOD.	*Mortgage value per acre.*		*Price per acre.*		PERIOD.	*Mortgage value per acre.*		*Price per acre.*	
	Cultivated.	Total.	Cultivated.	Total.		Cultivated.	Total.	Cultivated.	Total.
Before last Settlement ...	24	7	...	...	Before last Settlement ...	22	8	...	...
1877-78 to 1885-86 ...	34	13	44	16	1878-79 to 1879-80 ...	25	8	20	8
1886-87 to 1890-91 ...	35	16	43	15	1880-81 to 1884-85 ...	22	10	19	11
1891-92 to 1895-96 ...	38	16	47	18	1885-86 to 1889-90 ...	33	15	31	19
1896-97 to 1900-01 ...	35	16	74	31	1890-91 to 1894-95 ...	34	19	43	27
1901-02 to 1905-06 ...	36	18	58	15	1895-96 to 1899-1900 ...	37	22	57	27

The figures of the northern and southern tahsils have been given separately with regard to the different periods for which they were available. The value of land has risen steadily in respect of both mortgages and sales. In the earlier days, the *sahukars* in advancing money on mortgages went up to the sale price or even higher. In the quinquennial period preceding the passing of the Alienation of Land Act, there was an artificial rise in the price of land which could not be maintained. In the two northern tahsils, where figures for the last quinquennial period are available for reference, the price has gone down from Rs. 74 to Rs. 58 per acre of cultivation. Nevertheless it is higher than the average of the period 1891-92 to 1895-96 (Rs. 47). The mortgage value has not varied much. It would, therefore, appear that the Alienation of Land Act has not reduced the price of land to any appreciable extent."

Rates of interest.

The rates of interest charged naturally vary very widely. The usual rate for those who have ample credit is 1 per cent. per month or 12 per cent. per annum. A commoner rate, however, for the village money-lender to charge is 1 pice per rupee per month, *i. e.*, Re. 1-9-0 per cent. per month or 18¾ per cent. per annum. In some cases as much as 25 per cent. is taken. Interest rates fixed in kind and of similar scale to the above are common.

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Agricultural stock—Classes of stock kept.

Table 22 of part B gives quinquennial statistics relating to various kinds of agricultural stock for each tahsil and for the whole district: while table 23 gives figures showing the extent to which horse and mule breeding has been encouraged by Government or the District Board.

The district contains wide grazing grounds, from which a considerable revenue is realized. The consideration of the various classes of stock kept and the profits from each is therefore of importance. With the exception of buffaloes and camels, the stock bred is generally poor and small. The population of the Thal is largely pastoral and agriculturists no less than graziers are very much dependent on their stock. The revenue is paid largely from the sale of *ghi* and wool or of young camels, and the chief article of diet throughout the Thal is milk. To estimate the real number of stock in the tract is difficult, as the graziers are migratory and the stock is scattered over a very large area. In the Thal the number of horned cattle is in most years small: sheep are the chief stock in the Thal Kalan and goats in the Daggar. Every one, even the village menial, keeps them, and there is probably no house in an ordinary year without its *nikka mal* (small stock). Camels are seldom kept by the poorer land-owners and belong either to professional camel-graziers (Jats) or large land-owners. There is a system of joint ownership in stock, called *shahgumashtri*, which merits some notice. The *shah* or real owner buys the animals and hands them over to the *gumashta* to graze. The latter takes the *ghi*, the milk, the profits of the manure, and half the wool, and pays the *tirni*. At stated intervals accounts are struck; the existing stock is valued; and any increase on the sum originally laid out is divided in equal shares between the *shah* and the *gumashta*. There are very elaborate accounts of this nature extending over many years, but they seem to lead to very few suits in the courts. In some villages the greater part of the stock is owned by *kirars* on the *shahgumashtri* system.

Kine.

The district exports no cattle, but imports plough bullocks. The cattle bred in the district are generally small. The country is not well suited for cattle-breeding. In the Thal it is often difficult even for close browsers like sheep to pick up a subsistence. The large cattle required to work the Thal wells are nearly all imported from the south, from Rajanpur and Shikarpur, and a few only are home-bred. The breeding stock has improved but little and the *zamindars* take no trouble to put their cows to good bulls. The average price at which bullocks are bought is (taking good and bad together) Rs. 20. The bullock is used

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at the age of four (*chauga*) or five (*chhigga*) and is at its best from six to eight (*mila hua, i.e.*, having got all its teeth): it becomes a *budhra* at about ten. The skin is worth from one to two rupees.

Agricultural stock—Kine.

Recently some attention has been paid to the matter of breeding by the district board. A sub-committee of members has been appointed in each tahsil, for the purpose of encouraging improvement in the breeding of cattle. The number of district board bulls has been increased and some bulls of Dhanni breed from the Talagang and Chakwal Tahsils have been introduced. The number of district board bulls now maintained in the district is 21.

It is as yet too soon to estimate the success of these efforts.

Milch kine.

Most *zamindars* keep a cow or two, while Hindu shopkeepers usually keep several. In the Thal, though less important than sheep, a few cows are to be found at most of the wells. The owners generally have to send their cows to the Kachchi for grazing for several months of the year. The Thal cow is small and a poor milker, an average cow giving two seers of milk a day for seven months in the year. The annual production of *ghi*, after allowing for expenditure of milk on domestic uses, would be 12 or 13 seers. The average value of a cow in the Thal is about Rs. 15 to 20. They begin to breed at about five years old and will bear five or six calves.

Buffaloes.

Most of the buffaloes of the district are to be found in the river villages of the Indus Valley. There is no grazing for buffaloes in the Thal. Wherever there is suitable grazing for them, they are very profitable. In the Kachchi the possession of a buffalo is a sign of respectability and the presumption is, that, whoever does not keep one, is hard up. As a rule the Kachchi *zamindars* give their buffaloes no artificial food. They are allowed to graze in the jungle, and sometimes in the season get fed on peas (*mattar*) or other green crops. A buffalo calves when four years old, after which, if breeding regularly, she calves every second year. She gives milk for a year more or less after calving, and calves generally five or six times successively before she ceases.

In an ordinary herd of 40 buffaloes on an average a third or a fourth will be in milk at once; an equal number will be with calf, and the remainder will be made up of young beasts under four years old, and of animals that have not held or that are barren or past bearing. A buffalo in milk is called *trokhar*, out of milk *korag*. An ordinary Kachchi buffalo, when in milk, gives

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about four seers a day; but the amount varies with the time of year, being most plentiful during the rainy season and early autumn, when fodder is abundant. The yield of *ghi* is about a seer to every sixteen seers of milk. The expense of keeping them, when a man has sufficient grazing for them, is little more than the pay of the herdsman. The latter is often paid in kind, being given the milk every fourth day as his share of the business. Besides the *ghi* the owner of a herd of buffaloes makes something out of the young males. Buffaloes are used very little in this district in agriculture; the young bulls, however, are bought up by dealers from the Central Punjab. The bulk of the male calves are made away with, however, soon after birth, to save the milk.

Camels.

Camels are extensively bred in the Thal, which affords abundance of grazing. For most of the year they graze in the *lana* country. During the spring and early summer, from May to July, they graze in the *jal* tracts.

Nonetheless, the Thal camel in spite of the vast areas of *lana* and *jal* is inferior to those of the Kachchi or of the Jhang and Shahpur Districts or the Powindah camels. The reason no doubt is that *jal* and *lana* are insufficient as food, and that camels need also loppings from the *jand*, *kikar* or *ber*, and at certain seasons also green food such as turnips. The reason for the fact that camels are chiefly owned by the larger land-owners or by professional Jats is that it does not pay to keep them except in some numbers, and the grazing and *rakh* taxes in such cases mount up to a considerable figure. A *wag* of about ten camels needs two *chherus*, who, as a rule, take duty day and day about, for the animals range very widely in feeding, and one man cannot tend them continuously. The camel *chheru* receives about Re. 1-8-0 per month wages, and subsists on the milk of the she-camels. The *dachi* is covered by the *uth* when about four years old (*puraf* or *lihari*) and carries for thirteen months. The foal (*toda*) is weaned fully when about a year old, but the dam's udder is usually tied up in a bag long before then. The *dachi* bears till she is about eighteen years old. As a rule males only are laden. The foals are first broken to the nose-string (*mahar*) when about three years old (*trihan*), and bear loads till they are seventeen or eighteen years of age. No *ghi* is made from camel's milk, and the hair (*jat* and *milas*) is worth only about one anna a year for ropes. The skin is worth about Rs. 2, being made into *kuppas* for *ghi*. A good *chauga*, *i.e.*, six years old, seldom sells for more than Rs. 70 or Rs. 80, and the average may perhaps be put at Rs. 60. Practically no riding camels are bred in the Thal. Except in times of unusual demand the price of camels seems to have

declined of late years owing to the improvement in roads and the growth of railways. The profits from camels are at all times very precarious. A she-camel bears on an average about six foals. The females are kept to replenish stock, for camels are very delicate and subject to all sorts of murrain.

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Sheep and goats are grazed by an *ajri* or *chheru*. one man being considered sufficient for an *eiur* of from 80 to 120 animals (*pahara*). The *ajri* receives a *dhusa* (blanket), shoes and *roti*, the latter being 30 seers a month. The animals are kept out in barns (*bhana*) in the jungle in the cold weather, but are herded on the well lands for the sake of the manure in the hot weather. They are brought in to be watered twice a day in the hot weather, and once every day in the cold; and it is usual for some reason to light a fire and fan the smoke in their face with a sheet as they come up to the trough to drink. Powindah graziers usually have to pay a *pivi* or watering fee, but in the case of other graziers the manure is accepted as an equivalent. In many cases indeed the owner makes a sum out of the manure which exceeds the amount he has to pay the *chheru*. Sheep live mainly on the *chhember* grass, and though they will eat the young shoots of *lana* and *phog* and even *bui*, they die off rapidly directly the *chhember* fails. Goats are hardier, and the *jand* and *babbil* on which they depend are less liable to fail them. All small stock are subject to a variety of diseases, most of which are rapidly fatal.

Sheep yield both *ghi* and wool; the goat is of less value, and is chiefly of use as supplying drinking milk. It is shorn once a year in *Cheth*, and the *jat* produced, which is used in making ropes, is worth one anna a year. Milking goats (*trokar*) are sold for about Rs. 4 and rams fetch from Rs. 3 to Rs. 3-8-0. In 100 goats the yearly sales might be put at 20 = Rs. 60; skins = Rs. 5; *jat* = Rs. 5. The cost would be—*Chheru* Rs. 36, reduced a good deal if manure is sold; revenue (at an average of one anna) = Rs. 6-4-0; total, Rs. 42-4-0. The figures relating to sheep are much more important. They are shorn twice a year, and the shearings (*pothi*) have of late years been sold at about four or five to the rupee in the Thal, and five to the rupee in the Daggar. A sheep will thus yield about eight or nine annas worth of wool in the year. The milk is not drunk by the Hindus or the richer Musalmans, but every one else drinks it. The ewes give milk for about four months after lambing. They are milked twice a day; the cream is churned with the *madhana* and the buttermilk (*lassi*) reserved for drinking. A milking ewe (*trokar*) may produce from about one seer to a half seer of milk

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a day, and if she lambs twice and remains in milk seven months of the year, should in theory produce nearly three seers of *ghi* a year. Ewe's milk is esteemed above all others for its *ghi*. The *zamindar* sells sheep's *ghi* to the *beopari* or trader, who mixes it with *ghi* from cow's milk and sells it as second class cow's *ghi*. The butchers from Peshawar and Multan buy up rams for about Rs. 3-8-0 and ewes for about Rs. 2-8-0. The skins sell for three or four annas. The sheep are of the ordinary thin-tailed variety, and are much lighter than the fat-tailed sheep, called *dumbas*. In good years sheep multiply fast, but occasionally nearly the whole stock of a group of villages may be exterminated by murrain.

Horses.

There are a fair number of horses in the district. As a rule they are too small for cavalry remounts, but plenty of small-sized animals are procurable.

Donkeys.

Donkeys are largely kept, for the most part by *banias*, though near towns the *zamindars* keep them for fetching manure. They are employed in conveying merchandise, carrying bricks, and other articles, and also for riding.

Mules.

Very few mules are bred in the district.

Diseases of cattle.

The chief diseases which attack sheep are *munkhur* or foot and mouth disease; *pan* or itch; *rikki* or *churki*, dysentery; *jhola*, convulsions; *galgotu*, ulcerated throat; and *pipri* or *tili*, a fatal catarrh. These diseases also attack horned cattle which are, in addition, subject to *mihru*, a maggot producing festers, and *pipanu*, a swelling of the intestines.

The most fatal disease is cowpox, known variously as *sitla*, *mairani*, *cheechak* or *thadri*. The remedy usually adopted is to take the affected animals to a shrine.

There are three veterinary dispensaries, one in each tahsil, with a Veterinary Assistant in charge of each. These are fairly well patronized.

Fairs.

A small cattle market is held weekly at Isa Khel. No other cattle fairs of importance are held in the district.

Irrigation.

The cultivated area classed as irrigated in various forms is shown in table 18, while table 24 gives figures year by year relating to canal irrigation.

In the year 1912-13, 51,291 acres or 8·7 per cent. of the total cultivated area were classed as irrigated. Of this area 34,389 acres were irrigated from wells, and 16,902 acres from canals, and in addition there were 228,559 acres or 38·8 per cent. of the total cultivation, subject to inundation from

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the Indus. The canal mileage amounted to six miles. The district possessed 2,470 masonry wells, besides 134 unbricked wells and water lifts. Nearly the whole of the Kachchi is intersected by branches of the Indus and in the higher portions dams are thrown across these streams and a few small canals excavated, but for the most part the people trust to inundation and percolation. Canal irrigation in the Isa Khel Tahsil consists of cuts from the hill streams. Well irrigation is the great feature of the cultivation of the Thal. In the north-east and extreme east the water level is so deep that wells are used only for watering cattle, but in the west and centre of the Thal they supply a good deal of cultivation. A description of well-cultivation has already been given in a previous portion of this chapter.

The Nammal Canal.

The Nammal Canal was opened in December 1913. It receives water from a lake, caused by a dam, constructed across a gorge between Nammal and Musa Khel. A description of the dam and canal will be given in Section F. of Chapter III. The tail of the canal is at Mianwali, where it conveys water to lands in the Civil Station. The canal was included under schedule I of the Minor Canals Act of 1905 by Punjab Government notification No. 84, dated the 9th June 1914; while under notification No. 85 of the same date the following rates were imposed for the use, in an authorized manner, of water from the canal, such rates to be in force for a period of two years from *rabi* 1914 :—

I.—Two hundred and sixty acres, which formerly received a perennial supply of water from the Vial, will be exempt from payment of the water rate.

II.—For the Civil Station of Mianwali and lands irrigated from the station distributary—Rupees 2-8-0 per irrigated acre per harvest.

III.—On all other lands—Rupees 2 per irrigated acre per harvest.

NOTE.—

(1) Half rates will be charged for irrigation by lift.

(2) For the first two harvests from receipt of water, half rates will be charged.

IV.—Miscellaneous—

(1) For brick-making – annas 2 per 100 cubic feet.

(2) For filling tanks,—annas 8 per 1,250 cubic feet.

Provided that the rate under class (2) may be reduced or remitted at the discretion of the Collector.

V.—After a period of two years the above-mentioned rates shall be revised.

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Irrigation—The Kurram Canals.

In the Isa Khel Tahsil there are a series of water-courses, taken out of the Kurram river by means of temporary spurs of sand thrown out into its bed. These are known as the Kurram Canals. The flow is continuous during the winter, except after a fall of rain, when the rush of water in the river carries away all the spurs. They have to be re-erected each time. During the summer months the supply of water in the Kurram runs very low and what water is left is full of salt. The head-works disappear during the rains, but the replenished supply of water is utilized by means of fresh spurs constructed as soon as the water runs low enough. There is unfortunately no gauge to measure the quantity of water flowing down the Kurram or the canals, as the shallowness of water in the river and other circumstances have not permitted the fixing up of a gauge so far. It is, however, clear that, owing to the vast extension of canal irrigation higher up in the Bannu District and across the border, the timely supply of water has been greatly affected. When water is most needed for ploughings, etc., the supply is very limited and the water received all comes from the lower salt water springs without any admixture of sweet water from the Kurram proper or Gambila. The water consequently impregnates the land with saltpetre at an accelerated rate, and although the coarser crop of barley does not suffer much, the growth and outturn of wheat are largely affected and it becomes almost impracticable to raise a *kharif* crop.

The main canals taken out of the Kurram are these :—

1. Kas Abdul Rahim Khan.
2. Kas Umar Khan.
3. Kas Jadid.
4. Vial Sher Khan.
3. Vial Surkhru Khan and Sarwar Khel.
6. Kas Sadulla Khan.
7. Kas Sheikh Azim.
8. Kas Khaglawala.
9. Kas Kacha Nur Zaman.
10. Kas Kanglanwala Kacha.
11. Kas Gajranwala.
12. Kas Attak Paniala.

The last four canals irrigate lands in the Kacha and have been built since the 1st Regular Settlement. The management of the canals was completely in the hands of *zamindars* before that Settlement on a system of *Sijji*, *Mashki* and *Waku*, to be described below. Mr. Thorburn was able to abolish it on the largest of the canals, *i.e.*, Kas Umar Khan; and the canals constructed since last Settlement as well as Kas Jadid adopted a similar system privately. The owner of Kas Abdul Rahim Khan makes his own arrangements and the old system still prevails

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Agriculture

Irrigation—The Kurram Canals.

on the remaining canals. The management of all the canals is, however, under the general supervision of the Tahsildar assisted by a Darogha and two *Chalveshtas* or Chaprasis.

The system of management may be described briefly as follows. The largest and the most important canal, Kas Umar Khan, is managed on the Tinga (canal labour) system, whereby the labour required for clearance of the canal and maintenance of the headworks is supplied by the landlords at the rate of one labourer throughout the year for every 500 *kanals* or 63 acres. The total number of labourers required for the whole canal was at the above rate fixed by Mr. Thorburn at 121 and the demand has, with slight modifications, been adhered to. The labour to be supplied by the citizens of the town of Isa Khel, on account of the Bhoras (patches of cultivation inside their courtyards and lanes), was converted later on into a cash assessment of 3 annas per *kanal* or Re. 1-8-0 per acre. A fine of 4 annas has to be paid for each absentee labourer. Gang leaders who are generally lambardars are responsible under the supervision of the Darogha to look after the work done by the labourers, and those who are not lambardars are paid Rs. 50 in all every year out of the proceeds of *nagha* (fine). The landlords either make their own arrangements for the supply of labourers or sometimes make the tenant work for them, undertaking to charge a smaller rent rate.

Abdul Rahim Khan is responsible for the clearance, etc., of his own canal. He employs regular workmen and charges *abiana* generally at the rate of $\frac{1}{6}$th the produce on all lands not his own, irrigated from his canal. The arrangement on the canals which still retain the old system is this. The canal-owners are different from land-owners and every landlord called *sijji* (or irrigator) has placed half his land at the disposal of these canal-owners (*mashkis*) on the condition that they take the responsibility of bringing water to the *sijji's* field. The *mashkis* incurred the initial cost of building the canals, but the annual clearance is effected by a class of labourers called *wakus*, who are given $\frac{3}{4}$ths of the land placed at the disposal of the *mashkis*. The *mashki* thus retains $\frac{1}{8}$th of the whole land, the *waku* $\frac{3}{8}$ths and the *sijji* $\frac{1}{2}$. Each makes his own arrangement for cultivation and although the revenue of the whole land is supposed to be paid through the landlord (*sijji*), the *mashki* and *waku* contribute their own quota of land revenue. A *pulanda* (watchman) has to be entertained for each canal, to see that the canal does not get breached anywhere or water wasted and there is a head watchman for all the canals, called *Chalveshta*.

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Agriculture.

Irrigation—The Kurram Canals.

Another labourer, called the *kasha*, has to be engaged by each landowner or by a group of landowners, to lay water on to their fields, to watch the crops, and later on to help generally in the harvesting operations. On Kas Jadid and the canals of the Kachcha, people have made their own arrangements similar to the Tinga system.

Hill torrents.

Some lands in villages of the two northern tahsils have the advantage of getting drainage water from the hills through hill torrents in addition to local rainfall. These channels, which are perfectly dry at other times, bring down very considerable quantities of water immediately after rain, and the water is laid on to the adjoining fields by means of spurs and embankments. The more important of these are Jaba, Wahi, and Trimmu, in Mianwali; and Chachali, Baroch, Adwala, Mitha, and Rakha, in Isa Khel.

Natural irrigation of the Kachchi tracts.

The cultivation all through the Kachchi depends on the inundations of the Indus.

The river begins to rise in April, but the water does not reach the greater part of the cultivated land until the gauge registers over 12 feet or so and then the copious flooding of the lands depends on the duration of the high floods. The lowlying lands and those adjoining the main stream get spill-water direct from the river, but the width of Kachchi tract between the two high banks is too large for ordinary floods to spread right through. A succession of dams (called *ghandis*) is therefore erected in some of the old channels of the river, which get water only during the floods and water is diverted from one *ghandi* after another to the higher lying lands. Each *ghandi* is breached after it has flooded up the area commanded by it, the water rushing down till it is stopped by the next *ghandi*, and so on. From Daud Khel to Kundian the lands adjoining the high bank receive their moisture in this manner.

In the Bhakkar Tahsil the conditions are similar. The Kachcha circle, or lowlying Bet lands, receive far more irrigation than they require. The Pakka circle, which contains the high lands lying under the Thal bank, or Dhaha, is the only part which ever needs aid in its irrigation. The main channel, which irrigates the Pakka, is the Puzal, Lalu, or Budho, as it is variously called. At present the set of the river is towards the east bank above its head, which lies almost opposite Darya Khan. The main river has cut into Kallurkot and sends a full supply, known as the "Kalluri Chal" down the Audhana Nala which lies

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directly under the Dhaha. This small *nala* has a large number of dams or bands erected on it, and the 'Saroba Paina' system prevails. On the Lalu or Puzal the dams do not begin till Machcharwali, some four miles south of Bhakkar. These dams are larger and sometimes need the supervision of the Tahsildar. A fixed quota of yoke for each village affected by the dam is laid down. In years of high flood these dams are always carried away, or cut to relieve the villages above them. But in the years of low flood they are necessary for the irrigation of parts of the higher land in the Pakka. In ordinary years the dams should not be cut, but the water led round through the network of *nalas* into the main channel below the dam. The system works easily and without much annoyance to the people.

Fishing industry.

The fisheries in the district are confined to the Indus. Fishing is free to everyone, and is carried on to a considerable extent throughout the length of the Indus valley.

The following fish may be caught in the Indus:—

Local name.	Scientific name.	REMARKS.
Damrah or Rohú ..	Labeo rohita ...	Very good eating. Caught up to 16 lbs.
Machani or kála-bans ...	Labeo calbasu ...	Up to 5 lbs.
Soni	Labeo cursa ...	Up to 1 lb.
Taila	Catla buchanni ...	Good eating: has a very large head: up to 6 lbs.
Mori	Cirrhina nurigara ...	Up to 9 lbs.: is very common: is usually sold in the *bazar* as Rohu.
Singára	Macrones aor ...	Takes the baited hook readily: caught up to 9 lbs: is good eating.
Khaga	Callichrous chechra ...	Small, ugly mud fish: caught largely in the rains: thought delicious by natives.

Section B.—Rents, Wages and Prices.

Rents.

The following figures relate to the quinquennial period ending June 15th, 1912, and show the cultivating occupancy of

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Rents, Wages and Prices.
Rents.

land and the extent to which different forms of rent were paid: —

	Acres.
Total cultivated area	659,754
Cultivated by owners	300,752
By tenants free of rent	3,504
By tenants with right of occupancy—	
At revenue rates with or without *malikana* ...	35,340
Paying other cash rents	1,463
Paying in kind	17,359
By tenants without rights of occupancy—	
At revenue rates with or without *malikana* ...	76,728
Paying other cash rents	434
Paying in kind	224,174
Total held by tenants paying rent	355,498

Rent rates.—

The rent rates ascertained at settlement gave an average of 37·8 or 38 per cent. of the divisible produce, against the similar rate of 35 per cent. at the 1st Regular Settlement. The rise was ascribed to extension of cultivation in tracts with a high rent rate. There are superior proprietors in all the tahsils, but most of them get from the inferior proprietors, with whom the assessment is made, a percentage of land revenue in cash, which is extremely small, and the area on which *khutti* (superior proprietary due) is paid to them in kind from the common heap is insignificant.

(*i*) Rents in Isa Khel and Mianwali Tahsils.

In Isa Khel and Mianwali Tahsils between the 1st and 2nd Regular Settlements the area under tenants-at-will rose in both tahsils, while that under occupancy tenants decreased not merely because the rights of some of the tenants of this class get extinguished for want of male issue or other causes, but chiefly because the extended cultivation goes to tenants-at-will or landlords, thus reducing the percentage of the cultivated area under occupancy tenants. The area under such tenants is very small in Mianwali, but that in Isa Khel still represents over 19 per cent. of the total cultivation. They pay land revenue with *malikana* in cash or kind, and in the Nahri Circle, where their proportion is the largest, they are a source of strength rather than weakness to the Khawanin landlords who cannot do without tenants.

The occupancy tenants generally pay land revenue with an addition of from 6 to 50 per cent. thereof or from $\frac{1}{20}$th to $\frac{3}{8}$ths of the net divisible produce as *khut i* (proprietary due) to the landlord.

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Rents, Wages and Prices.

Kind rents are also paid by occupancy tenants in some cases, but the area under such tenants is very small. Cash rents consist, with a few solitary exceptions, of land revenue with *khutti* at from $\frac{1}{14}$th to $\frac{1}{6}$th of the divisible produce.

Rent rates—(i) Rents in Isa Khel and Mianwali Tahsils.

As regards *batai* (kind rent) rates, there appears to have been a general rise since the 1st Regular Settlement. The *sailab* rents are very full ones. In the Mianwali Kachcha they have risen only slightly and amount on the average to almost $\frac{1}{2}$, but in the Isa Khel Kachcha, the rise has been very marked (from nearly 33 per cent. or $\frac{1}{3}$ to over 48 per cent. or close on $\frac{1}{2}$). The reason seems to be that some of the lands paying rent at lower rates in 1880 have been washed away and lands, thrown up by the river and brought under cultivation since, adjoin the villages of the Mianwali Kachcha, and the same high rent rates appear to have been adopted. In the Mianwali Kachcha, the prevalent rate has always been $\frac{1}{2}$, only a small area (usually that newly broken up) paying $\frac{1}{3}$. In the Isa Khel Kachcha, the percentage of area paying rent at $\frac{1}{2}$ the divisible produce has risen from 8 to 88, while the lands paying about $\frac{1}{3}$rd now represent only 11 per cent. of the total cultivated *sailab* area, against 57 per cent. at the 1st Regular Settlement. In the rents of *nahri* lands of the Nahri Circle, there has been a rise from 43 to 48 per cent., the proportion of lands paying $\frac{1}{2}$ having risen from 72 to 80 per cent., while the rents of similar lands in the Kachcha Circle of Isa Khel, which are merely flooded by canal water, have been assimilated to those of *sailab* lands and gone up to full $\frac{1}{2}$. The *barani* rent in the Khudri Circle is generally $\frac{1}{3}$rd. The Awan landlord sticks to the long-standing custom of his forefathers, but on some of the lands he asserts his feudal rights by adding a fictitious plough of his own to those of the tenant, and at the time of division of produce makes an addition to his rent on account of his supposed plough. This is called *moa jora* (or the dead plough). The addition thus made is generally 1 plough to 4 and results in an addition of $\frac{1}{5}$th to the ordinary rent of $\frac{1}{3}$rd. He, however, generally contributes the seed on behalf of his supposed plough. The inclusion of this due has resulted in the small increase from 32·8 to 33·5 per cent. in the *barani* rent rate of the circle. Besides the rent proper, the stronger landlords take a small due per plough, generally Re. 1 (called *panjali*), from tenants of lands lying at long distances from the villages, particularly on the hill-side. This is supposed to be in lieu of the privilege of the tenant to use up all straw, stalks and fodder. The fact is that the owner cannot make use of any part of the straw, etc., which is supposed to fall to his share on these outlying lands and contents himself

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Rents, Wages and Prices.

Rent rates—(i) Rents in Isa Khel and Mianwali Tahsils.

with this nominal due instead. For the whole circle this due does not work up to any appreciable sum. In the Pakka Circle, the rate on *barani* lands is mostly ½ now, the proportion of lands paying *batai* at this rate having risen from 60 to 82 per cent. In 1880, 30 per cent. of the *barani* lands in this circle paid only ⅓rd, but Niazai Pathans are harder task masters and are finding it possible to introduce the higher rate. Only 12 per cent. of the cultivated area now pays at ⅓rd the produce. A small area pays ⅖ths. The Niazai does not believe in roundabout ways of enhancing his income, and so instead of adding small dues to a more lenient rent, prefers to take his half share straightaway. In the Isa Khel Pakka, the *barani* rents were very low, the Khawanin landlords having been in the habit of taking lenient rents in consideration of personal service in times of need. There has been a gradual increase, the area paying ½ and ⅓rd having risen from 4 and 27 per cent. to 20 and 61 per cent., respectively, at the expense of that paying ¼ which has contracted from 45 to 9 per cent. Nevertheless the rise in the average rent rate of *barani* lands in the whole circle is not large. The improvement in the *barani* rents of the Bhangi Khel Circle has been but small. The *batai* rate of ⅓ is still very popular; the more exacting landlords are beginning to take ½, while the less common rate of ¼ is being given up. Rent payable on *naledar* lands is not more favourable than that paid on other *barani* lands, though such lands require more labour on the part of the tenant. The reason is probably that rent rates in each village depend on custom and the old feudal connection of landlords and tenants.

(ii) Rents in the Indus Valley of the Bhakkar Tahsil.

In the Indus valley portion of the Bhakkar Tahsil, the area under occupancy tenants is large. Their occupancy rights have been obtained by breaking up the waste. Hitherto there has always been arable waste available for cultivation. In this waste the superior proprietary body, who exist in almost every estate (unless they possess a mere *taluqdari* right, and are only entitled to a percentage of the revenue), possess preferential rights. But should they not exercise these rights the inferior proprietors may, with their permission, break up the land. If this permission is given and if, as usually, a small quit rent is taken the inferior proprietor acquires occupancy rights. This quit rent is known as *jhuri* from the knot tied in the grass to mark the new plot. If the inferior proprietors do not come forward the superior proprietors may give the land to outsiders. It has also always been the custom to give the status in the revenue papers to each occupancy tenure acquired in this way. As, however, land increases in

value the superior proprietors exercise their preferential rights to the exclusion of the inferior. It should be added that the diluvion of the plot destroys the occupancy tenure.

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Rents, Wages and Prices.

Rent rates—(ii) Rents in the Indus Valley of the Bhakkar Tahsil.

The difference between inferior proprietors paying heavy dues and the occupancy tenant is not very great. The percentage on the revenue paid by the inferior to the superior proprietors is Rs. 12-8-0. As the latter hold preferential rights in the waste the inferior proprietors differ little from occupancy tenants. Both are liable to lose their rights on diluvion, though the inferior proprietor is entitled to an equal area in any arable waste available or subsequently thrown up by the river.

The prevailing rent rates are from one-third to one-half on *sailab* and one-fourth on *chahi-sailab*. In actual practice rents are most complicated. In addition to the fractional *batai* so many *topas* of $2\frac{1}{2}$ *sers* each are levied on each *path* of 20 maunds. Or an additional charge of one or two rupees per *path* is taken. This is known as *tikk* and originated in a Sikh cess. This form is again varied, commonly by Hindus, to a fraction of *batai* plus a fixed amount of grain, or a fixed amount of grain per harvest without the fractional rent. Other and common rents include the payment by the landlord of only the same fraction of the revenue as the *batai* taken. The landlord provides, in some villages, seed in proportion to the share of the revenue paid by the tenant.

(iii) Rents in the Thal.

There are few cases of cash rent proper in the Thal. The difficulty of working Thal wells at a profit results in a large area held by tenants paying land revenue only. The form taken by the cash rents, when paid, is usually that of a *bil-mukta*, rent, *i.e.*, a fixed sum for the share of a well. In the Daggar *batai* rents are nominally paid on a considerable area of *barani* land, which is for the most part *shamilat* land in villages, where a superior proprietary body exists. In fact, however, a share of the produce is seldom exacted in these cases, and the rates which vary from one-half to one-seventh (one third, fourth or fifth being the commonest), are often traditional only, and the landlord is content to take what the tenant will give him. On well lands the rate is usually one-fourth.

Price of labour.

Table 25 of Part B gives figures showing the price of labour in the district at various periods, both skilled and unskilled. There was a marked rise between 1905 and 1910, the cause of which is not peculiar to the district, but is to be found in the general conditions which have affected labour throughout the Province during the years in question, such as the increased demand for labour for irrigation and railway works and the migration of

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Rents, Wages and Prices.

Price of labour.

Village menials.

labourers to the new canal colonies. The amount of labour employed in the district, apart from that required for the assistance of agricultural operations, is small. The district contains no large labour centres.

In all villages members of the menial and artisan class are found, who perform certain services for the land-owners and receive in return a certain share of the produce of each harvest. The results of the enquiries made at the last settlement (ending 1908) into the methods of payment of the menials are given in the following quotations from the Assessment Reports of the various tracts:—

Mianwali and Isakhel Tahsils.

"The principal menials recognized all through the tract under report are the *lohar* (blacksmith) and the *tarkhan* (carpenter). Their dues are equal, but they are paid at different rates in different assessment circles. Indeed the rate varies from one group of villages to another within the same assessment circle. In the Mianwali Tahsil, each menial is paid at *oza chhatti* (2 *sers* for every 4, 5 or 6 maunds), 2 *ozas* (4 *sers*) per *chhatti*, 1 *kurwa* (½ *ser*) per maund, 1 *ser* per maund or 1 *paini* (¾ *ser*) for every maund of 60 *sers* for all grains, and 2 *gaddis* (sheaves) of wheat and 2 *jholis* (lapfuls) of *bajra* per plough. In some villages more is paid per maund and less per plough, while in others the quantity paid for each plough is increased and the share of grain reduced. Two *poras* (equal to 4 *sers*) are given per plough out of gram where no wheat is grown. In the Mianwali Tahsil, the *nai* (barber) and *mochi* (shœmaker) are treated similarly to the principal menials, and receive the same dues. The *mullan* (priest) is paid at varying rates, while *mirasi* (bard), who works as a personal servant, is engaged at full *kamin* rates in the Khudri and in several villages of the Pakka and Kachcha circles, and other menials, like the weighman, *rakha* (watchman), *othi* (camelman), *pali* (cowherd), *mohana* (boatman), *kutana* (sweeper), receive dues in some places. In the Bhangi Khel circle of Isa Khel the barber is not paid out of the common heap, but the *mochi* (shœmaker) is a more important menial, owing naturally to the more urgent necessity of wearing shoes and their greater wear and tear. He is paid 7 *ozas* (17½ seers) out of *bajra*, and 7 *ozas* and 1 sheaf (*i.e.*, 20 seers) out of wheat, per plough. He thus gets more than either *lohar* or *tarkhan*. In the other circles of Isa Khel, *nai* and *mochi* are not entertained in every village.

A *laihar* or reaper has to be entertained at the harvesting of wheat, *bajra* and gram in all assessment circles except Bhangi Khel, where the holdings are small and the hardy cultivator can cope unassisted with the work. In other circles the reaper is allowed to pick one sheaf out of every twenty of wheat, one lapful out of every twenty of *bajra*, and one *pora* (heap) out of every twenty of gram; and he takes good care to pick up the one he specially prepares for himself, taking a much larger share than $\frac{1}{20}$th, particularly in years of plenty, when the crops are extensive and the demand for reapers largely exceeds the supply. On the other hand, owners of small holdings can get on without reapers. The *kumhar* (potter) is paid only out of *chahi* crops at different rates, which give an average of about one seer per maund. Menials also receive one seer per plough out of cotton or about $\frac{1}{40}$th, while women employed in picking the lint are paid at rates varying from ¼th

to $\frac{1}{12}$th. A labourer, called *kasha*, is entertained for the purpose of laying water on to the fields all over the canal-irrigated tract; he also watches the crops and later on helps in the harvesting operations. He is paid $\frac{1}{15}$th of the produce as his due."

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Rents, Wages and Prices.

Village menials—Bhakkar Tahsil, Indus Valley.

"In the Bhakkar Indus valley the following village servants and artisans have been reckoned as agricultural:—

Lohar	Blacksmith.
Tarkhan	Carpenter.
Komhar	Potter (on well lands only).
Dhunbir	Weighman and accountant.
Kotwal	Village watchman.
Karawa	Crop watcher.
Mohana	Ferryman (on Kachcha estates usually.)
Lai	Reaper.
Ponah	Chaff sifter and thresher.

There is no common custom as to payments or rather as to the method of reckoning. In some cases the dues are stated in so many *topas* to the *path* of 256 *topas*. More commonly the *lohar* and *tarkhan* are paid so many *topas* the yoke or well, the *komhar* per well, the *kotwal* receives a donkey load, the boatman a lapful or *jholi*, and equally various dues are paid to the others. Even where the whole are paid in *topas* per *path* presents in grain at sowing time, a seer or two of cotton, the right to a head-load of green corn render any exact calculation impossible. But the rates, however stated, usually approximate to the same amount.

The following is a statement of the ordinary rates where the *path* system is followed:—

	Sailab.		*Chahi-sailab.*	
	Rate.	Value.	Rate.	Value.
Lohar	3 *topas* per *path* ...	$\frac{3}{256}$	6 *topas* per *path* ...	$\frac{6}{256}$
Tarkhan	3 " " " ...	$\frac{3}{256}$	6 " " " ...	$\frac{6}{256}$
Komhar	...	...	4 " " " ...	$\frac{4}{256}$
Dunbir	2 *topas* per *path* ...	$\frac{2}{256}$	4 " " " ...	$\frac{4}{256}$
Kotwal	2 " " " ...	$\frac{2}{256}$	2 " " " ...	$\frac{2}{256}$
Mohana	2 " " " ...	$\frac{2}{256}$	2 " " " ...	$\frac{2}{256}$
Lai	5 sheaves per 100 ...	$\frac{5}{100}$	5 sheaves per 100 ...	$\frac{5}{100}$
Ponah	6 *topas* per *path* ...	$\frac{6}{256}$	6 *topas* per *path* ...	$\frac{6}{256}$
Total ...	...	12·0 per cent.	...	16·7 per cent.

The *karawa*, or watcher, is usually paid a *topa* per heap on the threshing floor. A similar payment known as *bismillah* or *rasulwahi* is also paid as a religious contribution. These cannot well be calculated. The *mohana* or ferryman is not paid in the majority of villages. Deducting his allowance the total payments would be 11·2 per cent. on *sailab* lands and 15·9 per cent. on *chahi-sailab*. On many small holdings the charge for the reaper and chaff-sifter would not occur, or only partially.

The *kharif kamiana* is always somewhat less than the rabi."

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Rents, Wages and Prices.

Village menials—The Thal.

"In the Thal the deduction for menials' expenses is a little difficult to calculate owing to the variety of rates prevailing, and the difference in the measures of weight used. The weights used are—4 *pans*=1 *paropi*; 4 *paropis*=1 *topa*; 4 *topas* =1 *pai*; 4 *pais*=1 *chauth*; 4 *chauths*=1 *bora*; 4 *boras*=1 *path*. The *topa*, however, varies from 2¼ to 5 seers; two different kinds of *topa* often exist in one village. The menials are the *dhirkan*, the *kumbhar*, the *lohar*, the *leihar* or reaper, the *pona* or winnower, and in the case of cotton, the *choni*, or picker. The weighman (*dharwai*) and accountant (*domber*) are found in a few villages only; but the *mochi* must be admitted an agricultural charge, as he supplies blinkers (*kopas*), thongs, etc. The rates are usually spoken of as so much per well, but a study of them shows that the origin of the rate is an allowance for each cultivating yoke, and by recording them on this basis it is possible to deduce something like a uniform rate for each circle. The wage of the potter and carpenter works out at about 42 seers of grain each and one seer *phutti* per yoke in the Thal Kalan; it is rather less in the Daggar. The blacksmith nearly always takes half the amount of the two chief menials. The reaper takes a certain proportion of the sheaves; it is put at one in twenty if his sheaf be large and one in forty if it be small; actually his share amounts to one-thirtieth as an all-round average. The average share of the *choni* (cotton picker) is about one-fifth. The *pona* takes a share which it is possible to put with some accuracy at one-fortieth. The *mochi* takes nominally the same share as the blacksmith. Payments of grain are usually made two-thirds in wheat, one-sixth in barley and one-sixth in other grain."

Prices.

The prices which were sanctioned for adoption, after enquiry during the Settlement operations at last Settlement (ending 1908) are given below in annas per maund, and compared with those which had been adopted at the first Regular Settlement (1879-80):—

Tahsil.	Detail.	STAPLE.													
		Wheat.	Barley.	Gram.	Peas.	*Massar.*	*Sarsh f.*	*Tara mira.*	*Bajra.*	*Jowar.*	*Moth.*	*Mung.*	*Mash.*	*Til.*	Cotton.
ISA KHEL.	First Regular Settlement.	18, 19 and 21	11 and 13	18 and 21	8	11 and 16	21	16	16	13	18	32	21, 26 and 32	64	49
	Second Regular Settlement.	28	18	22	22	23	40	31	24	20	26	34	34	60	64
MIANWALI.	First Regular Settlement.	18 and 19	11 and 13	16	11	16	32	21	16	13	13	20	23	32	49
	Second Regular Settlement.	30	19	22	22	23	40	31	24	20	26	34	34	60	64
BHAKKAR.	First Regular Settlement.	18	14	16	14	...	32	22	16	14	16	32	...	48	48
	Second Regular Settlement.	27	18	21	16	16	49	32	26	22	26	40	32	53	58

Prices.

These figures show an all-round rise of 57 per cent. in Mianwali, 30 per cent. in Isa Khel, and 43 per cent. in Bhakkar. It was, however, recognized in the assessment reports and orders passed thereon, that this increase was exaggerated, and the percentage of increase accepted, as a basis for judging the pitch of the new assessment, was 20 per cent. throughout the district. The construction of the Sind-Sagar and Mari-Attock Railways in the intervening period, affording an easy means of export for the surplus of the greater portion of the district, and replacing the somewhat hazardous traffic by boats, no doubt contributed largely to the increase in prices. Prices in the Daggar do not differ much from those current in the town of Bhakkar, but those prevailing in the Thal Kalan are usually somewhat higher than the Kachhi prices. The Thal is not fully self-supporting owing to the needs of the large grazier class, and food-grains are imported both from the tahsil towns and from the villages on the Shahpur and Jhang Kachhi, which lies close to the eastern Thal Kalan.

The alteration in prices of the main staples since settlement are shown in table 26 of Part B.

Material condition of the people.

On the whole, recent years have brought a considerable rise in the standard of comfort. Though this is less noticeable among the ordinary cultivating and labouring classes than among the more well-to-do *zamindars* yet even among the former there is a tendency to substitute finer machine-made cloth for the coarser cotton garments woven in the villages, while such articles as enamelled cups, brass lamps, and similar manufactured products are daily becoming more used. In the towns and larger villages the style of houses is improving and masonry houses are increasing in number.

Among the well-to-do *zamindars* thick woollen coats for winter wear are common, while such luxuries as English saddles, or guns, or shoes of English pattern are sometimes invested in. Among the womenfolk the proportion of gold ornaments worn is probably larger than it used to be.

These improvements in dress and general accessories are shared also by the middle class clerk, though in his case it is sometimes dictated by a necessity for maintaining appearances, in spite of difficulties in making both ends meet, and on the whole this class's standard of comfort is probably little better than what it was a generation ago.

It is doubtful whether the advance in the standard of living among the cultivating classes has kept pace with the increase in

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their wealth. It is commoner for them to squander their ready money in extravagant expenditure on marriage or other ceremonies than to invest it in material comforts.

Material condition of the people.

Moreover, the improvement in the general style of living is by no means general, and has not yet affected in any appreciable degree the more backward tracts such as Bhangi Khel and the Bhakkar Thal. The following extract from the Assessment Report of the latter tract, written in 1903, gives a vivid idea of the condition of the Thal people, which is no less true now than when it was written:—

The prevailing note among the Thal people is their poverty—a poverty not only of resources but also of enterprise and intelligence. A continual struggle with Nature in her most niggard and capricious mood leaves them too exhausted for any other effort. They will not enlist or take any kind of service, and admit their lack of enterprise with the excuse that they are 'camel-hearted.' There is, indeed, much in the comparison, for they have to undertake an immense amount of the dullest kind of labour on the poorest of diets, and for the meanest of rewards. The well owner displays an industry far greater than his neighbour in the Kachhi, but the cost of his oxen, the scarcity of the rainfall, and the severity of the climate ensure him the poorest of results. He eats but little wheat or barley; for part of the year he and his family live on turnips and melons, and for the rest the supply of grain is eked out by wild fruits—the berries of the *jal*, the *jand* and the *ber*. The shepherd and the camel grazier ask and enjoy still less. They exist almost entirely on the milk of their sheep or their camels, aided by such grain as they earn by work at harvest time in the Kachhi. They eat a good deal of meat, for besides the food afforded by an institution resembling that of a mutton club, they never hesitate to use the knife on an animal dying of disease, be it bullock, goat or—horresco referens—a camel. How arduous the lives of these people must be, only those who have experience of the scorching sun and devastating sand-storms of the Thal can realize. But the poverty of the Thal carries some compensation in the health enjoyed by its inhabitants, and the age of their men and the strength of their women are a by-word in the district. Indeed, it is the poverty of poor living only, for there is never any actual famine, and in the worst of times temporary migration is no hardship to a half nomadic people. But they always hark back to the Thal, for their primitive instincts are not yet trained to a civilization, which is embellished by the Tahsil *chaprassi* and the Munsif's Court.

Section C.—Forests.

Forests.

The total area of Government forests (*rakhs*) in the district is 496,147 acres. These are all in charge of the Deputy Commissioner, and none are under the Forest Department. Table 27 of Part B gives a complete list with the area of each *rakh*.

Those in the Mianwali and Isa Khel Tahsils consist chiefly of groves of *shisham* (*Dalbergia sisoo*), while those in the Thal are patches of waste land leased for grazing. Lessees are nominated

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Forests.

System of leasing Thal *rakhs.*

for each Thal *rakh* and the shares determined. The lease is renewed from year to year. The amount is a fixed one, but the Collector has power, subject to the control of the Commissioner, to remit, in years of drought or murrain, such portion of the demand as he thinks necessary. The lessees are nominated solely from residents of villages using the *rakh*. Each village usually has a fixed share. The leases provide for the observance of a close season of two months, during which the *rakhs* are closed. The grazing rates collected by the lessees are fixed, but vary in different *rakhs*, but plough and well cattle graze free except during the close season.

History of formation of the *rakhs* and origin of the old *rakhs* in the Bhakkar Tahsil.

The following extracts from the old Dera Ismail Khan Gazetteer describe the origin of the old *rakhs* in the Bhakkar Thal and the principle, upon which new *rakhs* were formed at the First Regular Settlement :—

"At the recent Settlement the question of the *tirni* assessment became mixed up with that of the demarcation of boundaries in the Thal waste. Up to then the Thal waste generally had been looked on to some extent as the property of the Government. At the same time, certain bodies of *zamindars* had exclusive rights to sink new wells in almost all parts of the Thal, except such as were included in Government *rakhs*. There were no exclusive rights of grazing : residents and outsiders grazing freely all through the Thal, regardless of the so-called village boundaries. The Thal boundaries of the villages lying partly in the Thal, party in the Kachhi, had been demarcated by the Revenue Survey in 1856-57. The remaining villages were left undemarcated. About 1864, in accordance with a general order issued by the Commissioner for the whole district, the supposed boundaries of most of the Thal villages not previously demarcated were fixed by the *patwaris*, and rough *thakbasts* made.

"At the recent Settlement the whole question was elaborately discussed. The proposals made, the conclusions arrived at, and the reasons for these conclusions, are set forth at length at pages 260 *et seq.* of Mr. Tucker's Settlement Report. Eventually it was decided :—

"(1) To respect absolutely the *mauzawar* demarcations of the Thal-Nasheb villages made by the Revenue Survey in 1856-57.

"(2) In the case of those Thal *mauzahs* (not demarcated by Captain Mackenzie), where the demarcation subsequently made did not give the village an excessive amount of waste, or, in other words, where the *mauzahs* were small, and there were many wells, then the whole of the waste to be allotted to the village, the same boundaries being adopted, or only slightly altered and simplified.

"(3) In the case of the large villages in the big Thal, to cut these up as far as possible into separate *dakhili mauzahs* of about the same size as the smaller Thal villages already mentioned. In doing this the intervening blocks of waste would be formed into Government *chaks*.

"The principle followed in marking out the boundaries was that, subject to the above rules, the cattle of each village were enumerated, and allotments of waste land were made at fixed rates in proportion to the head of cattle.

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Forests.

History of formation of the *rakhs* and origin of the old *rakhs* in the Bhakkar Tahsil.

The excess waste was taken up as Government *rakh*. Each village gets the waste lands left to it in full property, and can exclude outsiders from grazing within its limits. This demarcation of boundaries partook of the nature of a partition. The Government and the *zamindars* had hitherto had concurrent rights in the Thal. The *zamindars* had a right to exclude outsiders from sinking wells; the Government could put in outsiders to graze. The *zamindars* have now been allowed grazing lands in accordance with their requirements, and the surplus waste has been formed into Government *rakhs*. The scale on which these allotments were made is as follows:—

Camels and horned cattle per head	$12\frac{1}{2}$ acres = 5 shares.
Sheep and goats	$2\frac{1}{2}$ „ = 1 share.

The actual allotments are somewhat in excess, being $3\frac{6}{10}$ acres per share in the Daggar circle, and 3 acres per share in the Thal.

"Before describing the new *rakhs* that have now been formed, it is necessary to describe the old *rakhs*, that have come down from Sikh times. The origin of these *rakhs*, or grass preserves, is described by Captain Mackenzie. Some of them date as *rakhs* from the time of the Jaskanis. When the country came under the Nawabs, a series of military posts was established all over the Thal. These were 23 in all in the two tahsils. The principal were the forts of Mankera and Hyderabad. The fort of Mankera covers 46 acres of ground and had a large garrison. Hyderabad, 15 miles to the east on the Jhang border, was also a considerable place. The other posts were of minor importance. For the subsistence of the garrisons it was necessary to take up large adjacent tracts and form them into preserves for the supply of forage. It is also said that the Nawabs discouraged cultivation in that part of the country round Mankera, which they held in greatest strength, in order that the want of water might deter possible invaders. These *rakhs*, however, never form tracts surrounding a post; they always lie to one side, and generally very close to the towns from which they take their names. On one side therefore the townspeople can graze freely; on the other they are hemmed in by the *rakh*. Some of these *rakhs* were very large. The Hyderabad *rakh* is 80,000 acres, the Mankera *rakh* 50,000 acres in extent. These *rakhs* were retained by the British Government. They were, under the system of free grazing, a great convenience to the people, as they were entirely closed for a month or two in the spring and again during the rains, the seasons when the grass is growing. The grass is thus preserved, and these *rakhs* form reserves of great value when the common pasturage is exhausted. Their abolition as *rakhs* would be quite other than a public benefit, for they would be over-run with cattle simultaneously with the rest of the country, and the grass in them would be wasted, and not, as now, available in times of scarcity in other parts."

Government *Rakhs* in the Isa Khel and Mianwali Tahsils.

The only Government land in the Khudri Circle is *rakh* Sakesar, in which a small bit of land is held on a cultivating lease. There are 10 Government *rakhs* in the Mianwali Pakka (Thal portion), measuring about 90,000 acres and two small *rakhs* in the Kachcha measuring 1,630 and 452 acres, including 274 acres of cultivation held on a lease during the term of the current Settlement. In the Isa Khel Tahsil there is one *rakh* in the Kachcha with two blocks of State land. The *rakhs* are leased annually for grazing and bits of land are given every year for cultivation being included, in the case of the Pakka *rakhs*, in the *rakh* leases and let out on kind rent in the Kachcha.

Section D.—Mines and Mineral Resources.

Rock-salt occurs at many places in the Salt Range and in the Maidani Range across the Indus. It is, however, worked only along the right bank of the river near Kalabagh, where the salt stands out in the form of solid cliffs and is quarried on the surface. Long before the British annexation of the Punjab, Kalabagh was famous for its salt, which is exposed in large quantities, and of which the purity, closeness of grain, and hardness of a great proportion of it are remarkable. The salt occurs underlying Tertiary strata in workable seams of from four to twenty feet thick, alternating with seams of impure salt and marl. The salt outcrops to a height of about 200 feet above the bed of the gorge, the seams striking south to north, and dipping to the west at an angle of about 70°. The quantity of salt is practically inexhaustible, both at Mari and Kalabagh. It is quarried in the usual way by means of powder, broken up into pieces of suitable size, and then conveyed to the Government Depôt on pack animals. There are twelve enrolled miners (Muhammadans). They supply their own powder and pack animals, and are paid by Government at the rate of Rs 4-2-0 per 100 maunds of salt passed over the scales. The whole of the operations connected with the salt up to the time that it is deposited in store at the depôt are in the hands of the miners. At the depôt the salt is weighed out to puchasers on the production of treasury receipts of the duty and price payable, and they make their own arrangements for its removal. The output of salt depends upon the state of the trade which is at its best during the winter months. The average output during the five years ending 1906-07 was 2,19,618 maunds. Salt.

Alum, which is abundant throughout the whole Salt Range, is extracted from pyritous shale at Kalabagh, where there is one factory, and at Kotki (11½ miles off at the mouth of the Chichale Pass), where there are three factories. The industry has greatly declined, owing to competition with other sources of cheaper supply. The total outturn is about 7,000 maunds per annum, while in 1884 it used to amount to as much as 22,000 maunds per annum. The price of Kalabagh alum varies from Rs. 4-8-0 to Rs. 6-0-0 per maund. The manufacture has been carried on for many generations at Kalabagh. The shale from which the alum is extracted, is dug from shafts in the hill-side, sometimes of considerable depth. The shale is first burnt in huge kiln-like mounds varying from 20 to 60 feet in height—a process which occupies from six to eight months. The calcined shale is then thrown into water, which, after the soluble matter has been dis- Alum.

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Mines and Mineral Resources.

solved, is drawn off into iron evaporating pans, and there mixed with a coarse kind of salt. As evaporation proceeds, the alum is formed in these pans in crystals of pink colour. Lastly, the crystals are again heated to fusion in iron pans, and poured, while liquid, into jars, where they assume the form of the alum of commerce.

Alum.

Kalabagh alum is not suitable for use in dyeing owing to the large quantity of iron, which it contains, and the fact that suitable methods of purifying it are not available.

Coal or lignite.

Coal or lignite is found in the district of two kinds, oolitic and tertiary. The oolitic coal is most common; it occurs at Jaba, cis-Indus; Kalabagh, Chopri, Chasmian, and Sultan Khel, trans-Indus; and crops out in many other parts of the Salt Range. The largest out-crop is in the hills between Kalabagh and the Chichhale Pass in Isa Khel. It is found in lumps of various sizes among dark bituminous shales, not in beds but in detached masses, which appear to be compressed and fossilized trunks of trees. The occurrence of these masses is altogether uncertain and irregular.

The coal is hard and light, very black, but marked with brown streaks, and often encloses nests of half decomposed wood resembling peat. It is not so easily inflammable as good coal; it burns quickly without coking to a light coloured ash, and emits a large amount of smoky yellow flame with but little heat.

The tertiary coal is found only at Kotki near the mouth of the Chichhali Pass, embedded in the alum shales for which that place is noted. It occurs only in patches, not in regular seams. It is, however, easy of access, and burns well, though containing a large amount of earthy matter. It principally differs from the Kalabagh coal in its lighter colour and in the amount of ash left by it.

A seam of coal of some value was discovered in 1903 near Malla Khel and a lease was taken by Rai Bahadur Anup Singh and Company of Lahore to work it. At Makkarwal also in the Maidani Range a lease to work coal was granted and some coal was taken out. In neither case, however, has the output been large.

Petroleum.

Rock-oil or petroleum is found at Jaba in Masan, near Kundal in the Khisor Range, and in lesser quantities elsewhere in the hills of Isa Khel and Mianwali. At Jaba there are ten springs, which produce about 600 gallons per annum of a thick dark-green sulphuretted liquid. The Garrison Engineer of Rawalpindi Cantonment has used the Jaba product for a great

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many years, to produce gas for lighting, but, with this exception, the existing springs have as yet proved of no commercial value.

Petroleum.

This oil is also used by the people, like tar, for itch on camels and sheep. The hill at the foot of which the springs lie contains sulphur.

Gold.

Gold is found in minute quantities mixed with the sand of the Indus. It is extracted by a laborious process of washing, and the yield is very small indeed.

Saltpetre.

Saltpetre is made on old village sites on either bank of the Indus and at several villages in its bed. It is extracted by evaporation from water, which has been passed through earth containing the crude salt. It is afterwards refined by further evaporation and boiling. Licenses are issued for its manufacture. At Kamar Mashani in the Isa Khel Tahsil there are seven saltpetre works.

Limestone, fit for ordinary building purposes, and building stone are also obtained in the district.

Section E.—Arts and Manufactures.

Manufactures.

The only manufactures of any importance in the district are the manufacture of striped cotton cloth (*susi*) and also of iron instruments of all sorts at Kalabagh.

Cotton-weaving.

Common country cloth is woven in almost every large village. Cotton thread and dyes are mostly imported from outside. Striped cotton cloth, called *susi*, which is made at Kalabagh, is sold at from 11 to 40 feet per rupee. *Susis* are exported, mainly to Bannu, Kohat, and Dera Ismail Khan. Simple blue *lungis*, worn by Khattaks, are also made. A few weavers work with their own capital, but the majority obtain their capital on credit. The number of weavers in the district is 6,805, and the total number of persons dependent upon the industry is 16,421. The earnings range from four to twelve annas a day. In Kalabagh there are 600 looms, and in Mari 1,000. In the south of the district at Mankera and Haidarabad, blankets (*lois*) and cotton checks (*khes*) are made of a somewhat superior quality.

Silk-weaving.

Silk-weaving is not carried on in the district.

Printing on fabrics.

Chhimbas (dyers) print cloth in various colours, for use as quilts or women's clothing, but on a small scale only.

Carpets.

No carpets are manufactured in the district.

Iron work.

The following iron vessels and instruments are manufactured at Kalabagh; *karahis* (big iron baking pans), *tawas* (cir-

Section G.—Means of Communication.

Railways.

The line of the North-Western Railway running from Multan to Rawalpindi passes though the district, with a short branch to Mari, opposite Kalabagh, and is joined at Kundian by the Sindh-Sagar Branch from Lala Musa. The Kalabagh-Bannu railway traverses the Isa Khel Tahsil. The Sindh-Sagar Railway was built in 1886, and the Mari-Attock Branch was completed in 1892. The Bannu-Kalabagh Railway was opened in 1913. The main stations of the Sindh-Sagar Line lie on the border of the Indus valley tract, and are easily accessible. The railways have had no appreciable effect upon language or religion, but have enhanced the security of the district against famine, and at the same time brought it within nearer reach of larger markets and fluctuating price movements. The total mileage of railways in the district amounts to 237 miles.

Roads.

The district contains three miles of metalled road and 640 miles of unmetalled road. These roads are all maintained by the District Board. The only metalled road consists of parts of the Civil Station of Mianwali and of the road from Mianwali towards Musa Khel. The old road across the Thal from Bhakkar to Jhang, which used to be a mail cart road, is now very little used by traffic, though it is still kept in a state of repair by the District Board. All traffic on this road is now carried by camels and donkeys. There is also a road running from north to south of the district along the edge of the Kachchi. In the Kachchi itself the roads are all hard and grassy, and during the hot weather are under water, while in the cold weather the numerous *nalas* form an impediment to any form of wheeled traffic. Tum-tums, however, ply on the road from Darya Khan to the bridge of boats across the Indus which leads to Dera Ismail Khan. Similarly, in the Isa Khel Tahsil, the roads are much cut up by irrigation channels and the course of mountain streams, which renders the use of wheeled traffic impracticable.

Rest-houses.

A complete list of rest-houses is given in Table 29 of Part B, which also gives full details as to the accommodation of each. Distances by road between the various places in the district are given in Table 30.

Water-ways.

There are no navigable canals in the district. A great deal of traffic is carried on the Indus to Multan and Sukkar. The Indus debouches from a narrow gorge a little above Kalabagh, and, as it enters the plain lower down, its bed attains a width of 15 or 16 miles. In the summer months it is subject to sudden and prolonged rises. It is nowhere bridged throughout its course

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Means of communication.
Water-ways.

in the district, but is crossed opposite Dera Ismail Khan by a bridge of boats in the cold weather, as well as by ferries at various points. The introduction of railway facilities has diminished the river's importance as a means of communication. It takes from ten to twenty days to reach Sukkar during the hot weather, and double that time in the cold. The return journey is always a slow affair. It takes from one to two months, according to the direction of the wind and the height of the river. The boat is often sold at Sukkar. The journey is a perilous one, and many boats never reach their destination. The boats used are of the ordinary heavy flat-bottomed type, and are made at Kalabagh or Isa Khel. The average capacity of grain-carrying boats is about 800 maunds, but ranges from 350 to 2,000 maunds.

Ferries.

The bridge of boats opposite Dera Ismail Khan has already been mentioned. In the hot weather its place is taken by a steam ferry boat. North and south of this, communication across the Indus is kept up by means of ferries, or by means of inflated goatskins, by the aid of which, swimming and wading, the river is crossed.

The following ferries across the Indus are under the control of the Deputy Commissioner :—Kalabagh, Mochh, Mianwali, Silwan, Piplan and Kallurkot. The lease of these is auctioned annually. The Kalabagh ferry is open all the year round, and is safe, rapid and easy. A ferry steamer connected with the railway has also plied here since 1913. The other ferries are practically closed, except for agriculturists, from May to October, and the passage of the Indus by them is a long affair, as, owing to the width of the bed and the number of the running channels, trans-shipments are required. The exact position of each ferry below that of Kalabagh varies each season according to the action of the river.

In the Bhakkar Tahsil below Kallurkot, there are also ferries at intervals ; these, however, are all under the management of the Dera Ismail Khan District authorities.

Postal arrangements.

The postal arrangements of the district are under the charge of the Superintendent of Post Offices at Jhelum. Besides Mianwali, which is the head office of the district, there are sub-offices at Bhakkar, Darya Khan, Isa Khel, Kamar Mashani, Kalabagh, Kallurkot, Kundian, Mari, and Mianwali city. To all of these, except Kamar Mashani, Kalabagh, aud Mianwali city, branch offices are attached. A full list of branch post offices is given in Table 31 of Part B. The post is transmitted

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Famine.

Postal arrangements.

by rail along the Railway Line, and in all other parts of the district is carried by dâk-runners. Table 32 gives statistics showing the volume of transactions from year to year. The number of letter mail articles received for delivery has not varied much in recent years, but there has been a steady increase in the volume of money-order transactions.

Telegraph offices.

There are seven combined post and telegraph offices in the district, at Mianwali, Bhakkar, Isa Khel, Darya Khan, Kamar Mashani, Kalabagh, and Kallurkot. Telegraph messages can also be sent along the Railway line through the Railway Telegraph.

Section H.—Famine.

Famines.

The district has never suffered seriously from famine. The Kachchi and a large portion of Isa Khel are rendered secure by irrigation or floods, as is also the area commanded by the Nammal canal in the Mianwali Tahsil. The scattered cultivation in the Thal depends very largely, though not entirely, on well irrigation. In the famine year of 1899-1900, the area of crops matured exceeded 70 per cent. of the normal area. During that year, however, scarcity of fodder in the Thal caused great mortality among stock of all kinds, and a large number of graziers left the district for the Jhelum and Chenab riverain. Most of these returned in the following year, when the rainfall was good. A similar drought occurred in the Thal after a six years' succession of bad harvests beginning in 1884-85, during which a large number of wells were deserted, and the owners left their homes. This drought led to a revision of the system of recovering grazing revenue, and to the attempted introduction of a fluctuating revenue on wells.

Relief works.

No famine relief works have been necessary in the district.

CHAPTER III.—ADMINISTRATIVE.

Section A.—Administrative Divisions.

Administrative divisions and magistrial and revenue staff.

The Mianwali District is under the control of the Commissioner of Rawalpindi, whose head-quarters are at Rawalpindi. The ordinary head-quarter staff of the district consists of a Deputy Commissioner, who is also District Magistrate and Collector, with two Assistant or Extra Assistant Commissioners at head-quarters and a third at Bhakkar in charge of the Bhakkar Sub-division, which comprises the single tahsil of Bhakkar. Of the Assistants at head-quarters, both do criminal and executive work, in addition to which one is employed as Revenue Assistant, and the other is in charge of the treasury. There is also a Subordinate Judge who performs criminal and executive work in addition to his other duties.

Each of the three tahsils, Mianwali, Bhakkar and Isa Khel, is in charge of a Tahsildar, who ordinarily exercises the criminal powers of a second class magistrate, and on the revenue side those of a second grade Assistant Collector. Each Tahsildar is assisted by two Naib Tahsildars. The village revenue staff is of the strength shown below :—

Tahsil.	Field kanungos.	Patwaris and Assistant patwaris.
Mianwali	6	81
Bhakkar	5	63
Isa Khel	4	42
Total ...	15	186

In addition there are a District and Office Kanungo with head-quarters at Mianwali, and an Office Kanungo at the head-quarters of each of the tahsils.

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Administrative Divisions.

Honorary Magistrates.

In addition to the officers above mentioned, there are a number of Honorary Magistrates in the district, exercising criminal, civil, and in some cases both criminal and civil jurisdiction. Of these, a Bench at Isa Khel consists of Khan Bahadur Muhammad Abdul Karim Khan, Khan Muhammad Abdur Rahman Khan and Khan Muhammad Faizullah Khan, who exercise second class powers, both criminal and civil. At Kalabagh Khan Bahadur Malik Ata Muhammad Khan exercises second class criminal and third class civil powers. In the Mianwali Thana third class criminal powers are exercised by a Bench consisting of Khan Sahib Risaldar and Woordie Major Ahmad Khan and Khan Sultan Khan. In the Bhakkar Thana also there is a Bench exercising third class criminal powers which consists of Diwan Tharia Ram, Risaldar-Major Sardar Muhammad Akbar Khan and Malik Muhammad Bakhsh. Besides the above Lala Jai Dyal exercises second class powers as an Honorary Munsif for the whole district.

Zaildars, lambardars, etc.

The number of zaildars, inamdars, lambardars, and chaukidars in each tahsil is given in the following table :—

——	Mianwali Tahsil.	Bhakkar Tahsil.	Isa Khel Tahsil.	Total.
Zaildars	11	14	6	31
Inamdars	28	57	16	101
Lambardars	300	338	171	809
Chaukidars	173	139	91	403

Zaildars are remunerated by a system of graded inams, the rates of pay being—

	Rs.
1st grade	200 per annum.
2nd grade	150 ,,
3rd grade	100 ,,

A scheme for the reduction of superfluous lambardarships on the occurrence of vacancies by death or otherwise has been in force since 1908.

Zaildars, lambardars, &c.

The following is a list of zails and zaildars who held office on 1st January 1914 :—

Name of tahsil.	Serial No.	Name of zail.	Name of zaildar.
MIANWALI.	1	Massan	Khan Bahadur Malik Ata Muhammad Khan.
	2	Thammewali	(Khan Bahadur Malik Ata Muhammad Khan.)
	3	Nammal	Malik Allayar.
	4	Musa Khel	M. Bahadur Khan.
	5	Daud Khel	Sayyid Qaim Hussain Shah.
	6	Mochh	Khan Fatteh Khan.
	7	Mianwali	Khan Sultan Khan.
	8	Wan Bhachran	Malik Amir.
	9	Kundian	Mian Hayat Ali.
	10	Piplan	Muhammad Abdulla Khan (minor).
	11	Sadat Miani	Hussain Bakhsh Shah.
BHAKKAR.	1	Kallurkot	Vacant.
	2	Panjgirain	Ghulam Kasim Shah.
	3	Darya Khan	Malik Ghulam Haidar.
	4	Kotla Jam	Malik Laddu.
	5	Bhakkar	Malik Muhammad Bakhsh.
	6	Dajal Sial	Fazal Hussain Khan.
	7	Behal	Ali Muhammad Khan.
	8	Bet Bogha	Allah Bakhsh Shah.
	9	Dhandla	Malik Ahmad Khan.
	10	Mankera	Malik Shah Alam.
	11	Haidarabad	Malik Fatteh Sher.
	12	Mahni	Malik Bara.
	13	Jandanwala	Malik Umar.
	14	Fazal	Gauhar Khan.
ISA KHEL.	1	Kalabagh	Khan Bahadur Malik Ata Muhammad Khan.
	2	Kamar Mashani	Khudayar Khan.
	3	Trag	Khan Bahadur Muhammad Abdul Karim Khan.
	4	Kalur	Muhammad Karam Dad Khan.
	5	Isa Khel	Muhammad Amir Abdulla Khan.
	6	Kundal	Abdur Rahman Khan.

Court of Wards.

There is at present only one estate under the management of the court of wards. It belongs to Khans Muhammad Abdur Rahman Khan and Muhammad Nawaz Khan, sons of Khan Muhammad Sarfaraz of Isa Khel. A large portion of their joint estate lies at Chak Jalpana in the Shahpur District.

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Civil and Criminal justice.

Other departments.

The district lies within the Western Police Range and is in charge of a Superintendent of Police, administrative control being exercised by the Deputy Inspector-General of the Range whose head-quarters are at Rawalpindi.

The district forms a Sub-division of the Shahpur Division, Public Works Department, Buildings and Roads Branch, and is in charge of a sub-Divisional Officer under the control of the Executive Engineer at Sargodha. It is included in the 1st (Rawalpindi) Circle.

Section B.—Civil and Criminal Justice.

Civil justice.

The Chief Judicial Officer is the District Judge, who resides at Mianwali and also acts as Sessions Judge for the Mianwali District.

There is also a Subordinate Judge, who performs civil judicial work, both original and appellate. Besides these, there are two Munsifs, who do only civil judicial work, one being stationed at Mianwali and the other at Bhakkar.

Table 35 gives the principal statistics relating to civil justice. The volume of litigation is on the whole fairly constant from year to year, and, the district being a backward one, the number of suits of large value is small. Matrimonial suits are fairly numerous, and of recent years suits arising out of disputes concerning immoveable property have shown a tendency to increase in the Bhakkar Tahsil, owing to the increase of cultivation in the Thal and the consequent avidity for land.

In addition to the agency above mentioned, civil judicial work is performed by the Sub-Divisional Officer at Bhakkar who has the powers of a Munsif of the 1st class, as well as by one of the Extra Assistant Commissioners at head-quarters.

Criminal justice.

Table 34 shows the statistics of Magistrate's cases returned as true, and the special features of the crime of the district will be discussed under Section H of this chapter. In addition to the ordinary agency for the disposal of criminal work, Punjab Government notification No. 23, dated 23rd October 1901, made the Frontier Crimes Regulation (III of 1901) applicable to the whole district, it having been previously applicable to those portions of the old Bannú and Dera Ismail Khan Districts which now comprise this district. Statistics relating to cases dealt with under this Regulation are given in Table 55 of Part B.

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Land Revenue.

There are eight 1st grade and eleven 2nd grade pleaders practising in the district. Two of the former and three of the latter practise at Bhakkar; the remainder all practise at Mianwali.

The Bar.

The number of petition-writers in the district is shown below:—

			1st grade.	2nd grade.
Mianwali	...	...	5	17
Isa Khel	...	...	...	5
Bhakkar	...	...	2	15
Total		...	7	37

Registration.

Statistics regarding registration are to be found in Table 37. The Deputy Commissioner is *ex-officio* Registrar of the district. Each Tahsildar is a joint Sub-Registrar in his tahsil and in addition the following gentlemen are non-official Sub-Registrars:—

Khan Sultan Khan at Mianwali.

Muhammad Sarbiland Khan at Isa Khel.

Subedar Fateh Muhammad Khan at Bhakkar.

Section C.—Land Revenue.

Village communities and tenures.

The conditions which obtain in the north are very different from those of the southern tahsil, and even the two northern tahsils have widely different histories. The only exception to this is that the conditions of tenure in the riverain and Thal portions of the Mianwali Tahsil approximate to those in the Bhakkar Tahsil. With this reservation, it is safe to say that the village communities and tenures in the Bhakkar Tahsil have developed on quite different lines from those in the northern tahsils, and accordingly it will be convenient to treat of them quite separately.

Mianwali and Isa Khel Tahsils.

The origin and history of the tenures prevailing in the Mianwali and Isa Khel Tahsils are given at length in the old Gazetteer of the Bannu District, which included extracts on the subject from Mr. Thorburn's Settlement Report of the Bannu District. These extracts, with very slight alterations, are repeated below:—

Isa Khel upland tenures.

Isa Khel may be divided into three tracts, which are separately discussed below, in most of which the measure of individual right is now possession, although it originally was ancestral or customary shares. Fines and other exactions, and the greed of the strong before annexation, and alienation and short-sighted action since, have wrought the change.

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Village communities and tenures—Bhangi Khel tenures.

The Khattaks are said to be descended from one common ancestor named Bolak and the Bhangi Khel branch is believed to have been in the possession of their present hilly home for over four centuries. Within the last four or five generations they have by purchase and other means acquired a good deal of culturable land from their Saghri kinsmen. They seem first to have divided their whole territory into blocks, allotting one or more to each of their sections. Within each block families squatted at pleasure until all the arable portion of the country was appropriated. After that, property devolved in the ordinary way. But as the Bhangi Khels grew in numbers, and had no objection to foreign service, many of their young men mortgaged or sold their patrimony and went elsewhere. The clan is now very numerous, and most of the available ground is under tillage, hence alienations of land are frequent. Hindus have little interest in the soil. Cultivated plots, together with the surrounding waste, the drainage of which they receive, are held in severalty by the peasant proprietors, each of whom lives in a substantially built homestead on his own ground. But the greater part of Bhangi Khel consists of stony hills suitable only as a pasturage for sheep, goats, kine and horses. All that part is still held in blocks and undivided.

Niazai and Jat villages.

From Kalabagh southwards to Mitha Khatak the Bhangi Khel and Gudd Khel Khattaks hold nine compact villages in that portion of the plain which skirts the Khattak Niazai range. Each village was settled independently. Of the nine, Malla Khel is the oldest, dating from before the Niazai influx into the country. Though all agree that the lands near the village sites were first divided on ancestral shares, such shares are now untraceable. The Niazais assert that the Khattak colonists came down and settled with their permission and acted as their humble allies, but it is hardly possible that such was the case. During the last two or three generations the Khattaks have been largely displaced by the "Khawanin" and others in Kotki and Mitha Khattak.

The Trag, Kanju, Kalu, and Bhut Jats are all said to have been first settled about Tank, and to have come with the Niazais *viâ* Marwat into Isa Khel. On the partition of the country, they were given land and settled down as separate communities. Both they and the Niazais divided their estates amongst themselves by lot on ancestral shares. Although the usual causes, and especially the power of Ahmad Khan and his successors, have reduced many of the Jats to the position of occupancy tenants or inferior proprietors, this division on shares is still easily traceable in their villages. It is also so in Kamar Mushani. Sultan Khel, a large village north-west of Trag, seems to have been finally settled only four generations ago, by squatting. To the south amongst the powerful Isa Khel Niazais, *tals*, *darras*, and *lichhes* are still known, and to some extent followed. The first word may be translated as the allotment of a clan, the second as that of a group of families in the clan, and the third as a single share in such an allotment. But amongst the Isa Khels, as with the Jats, the strength and ambition of Ahmad Khan and his successors, now represented by the "Khawanin," have done much to obliterate ancestral right, and shares are not acted on except where a *tal* is still held undivided, or in cases where the clan receives a fixed rent from the cultivators of the soil, *e. g.*, Kundal and Atak Paniala. Of the ten high bank villages in the south of the tahsil, of which the Isa Khel clan were once proprietors, the "Khawanin" now own the greater part of five. They or some of their members also own most of a large portion of four other upland and three other *kachcha* villages.

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These latter three were however acquired since annexation. The "Khawanin" have divided almost all their paternal estate amongst themselves since 1856, and hold it on eight shares. But as the partition was effected by lot, the respective areas of the shares differ largely.

Village communities and tenures—The *kacha* up to annexation.

Proprietary right in the low-lying tract subject to Indus inundation and known as *kacha* or *kachhi* was, at annexation, like the soil itself, in a very fluid state, and the tenures now at length determined and recorded owe their present forms, as much to the individual views of different officials, as to rapid but natural evolution from earlier types. For many years subsequent to the allocation in their present homes of the communities now established on either bank of the Indus, the arable lands of the *kacha* were sparsely inhabited jungle, the home of the tiger, the swamp deer (*goin*), the boar and the hog deer. Here and there groups of Jat families, Hirayahs, Mahens, Bhambs, Chinas, Jakhors, Anotras, Trers, and many other *gots* led a pastoral life, shifting their quarters from time to time, whenever compelled to do so by the ever-shifting river. But immediately beneath the Pathan, Sayad and Jat townships, fixed on both high banks of the river, there were strips and patches of cleared and cultivated land held in severalty on ancestral shares. In the jungle beyond lived the pastoral Jats just mentioned, each group confined to one particular locality within ill-defined limits. Those Jats were the ancient possessors of the *kacha*, and seem long to have been left undisturbed by their later settled Pathan neighbours. Though practically might was right for each community *quoad* the outside world, still men were few and land was abundant, so there was no occasion for the Pathans to hunt up and expropriate the amphibious Jat graziers. By Sikh times, however, numbers had largely increased. The villages crowning either bank at irregular intervals from Kalabagh to Piplan were strong. A common *modus vivendi* was necessary. So by degrees it came to be accepted that all the *kacha* fronting each village was up to some joint boundary, generally the deep cold-weather channel wherever it happened to be, its communal property. Of the dominant communities the Mushanis and Isa Khels along the west bank, and the Taja Khels, and after them the Ballo Khels and Watta Khels along the east bank held the largest domains. But on this latter side Pathan supremacy never extended south of a line drawn east and west about Kundi. There the two races met, commingled, and in conjunction formed village communities on equal terms. This Kundi was for many years the southmost limit of Sikh dominion, beyond which lay the territory of the Nawab of Mankera. On his fall, about 1822, the southern portion of what now is Mianwali became part of a separate administration and remained so until annexation. It was latterly included in Diwan Sawan Mal's Suba of Multan, and was administered by him, with one break of nine months, from 1831 until his murder shortly before the first Sikh war. Though the Sikhs treated the whole *kacha* as crown land, the Pathan communities of the neighbourhood, and specially the Isa Khels and Taja Khels never acquiesced in this view. Thus during Sikh rule squatters had two masters to propitiate. Many of the pastoral Jats had already settled down into a semi-agricultural life, paying, when coerced, a loose allegiance to the nearest Pathan village. Sayads too had squatted by invitation here and there, more particularly on debatable land, their sanctity securing them from attack by rival claimants. With the advent of Sikh dominion all cultivators became, so to say, Crown tenants, and men of all classes were encouraged to break up jungle. A fee to the *kardars* obtained a *sanad* or lease, and such a title-deed was valid against all tribal

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Village communities and tenures.

rights. But despite of such *sanads* the neighbouring Pathan clans exacted, when they could, some dues. Thus the Isa Khels took *loshatobra* or "plate and grain bag," *i. e.*, corn for themselves and their horses, and the Taja Khels *khutti* which was a small share of the grain of each harvest. Not unfrequently some Pathan, more enterprising than his fellows, either with or without a *sanad*, led a colony from his high bank township, and squatted on unoccupied land within the elastic limits of his tribal domain. Once a clearing was made, and a few shanties run up, miscellaneous persons would be sure to join in the undertaking. But at the best such colonies had a precarious existence. A successful one always provoked jealousies, and jealousies sooner or later provoked an attack, in which Sikh soldiery—acting under the orders or with the connivance of the fickle Sikh officials—often figured as principals or participators. The Sikh *jagirdars* and *kardars* or their underlings had small respect for each other's districts, and in order to compel the return of absconded cultivators or criminals, or on some other pretext, would poach freely on each other's preserves, harrying cattle, burning huts and carrying off grain when they could. Though most existing estates in the *kacha* were founded during the Sikh regime yet so unstable was the tenure of possession, so fickle and changeful the character of each *kardar's* administration, that the term "*sikha shahi*" is used to this day to describe official levity of temperament. There was one honorable exception. Within the limits of Diwan Sawan Mal's Government, in which were the Mianwali villages south of Kundi, life and property were fairly secure. In those villages there was a clear distinction between proprietor and non-proprietor. When new land was required for cultivation by a person of the latter class, he either purchased it by paying a small fee called *jhuri*, or he held it as a sort of occupancy tenant, and paid a small fixed grain rent, *khutti*, or *sol-satarhwin*. The latter by the way was sometimes taken, not as rent, but as a rate for village expenses, a cess analogous to the *malba* item of to-day. With the exception of this one favoured tract, it may be said that at annexation individual proprietary rights did not exist in the *kacha*, and that whatever rights the actual cultivators may have had, they all possessed in an equal degree. Each settlement was effected on a joint-stock principle, and the founder or manager had at most a claim to some little special fee. The contrast between then and now is a favourite theme with *kacha* grey-beards. There are still scores of them, vigorous old men now, who remember in the days of their youth how long stretches of the *kacha* were one dense jungle tract of trees, reeds and tiger grass; how they and their countrymen would at times, having sworn a truce to all jealousies, assemble in hundreds and drive the country for days and days snaring, spearing, and baiting pig and deer, and now and again shooting a tiger. Madad Khan, Taja Khel, whose village paid Rs. 7,086 revenue in 1873-74, tells how his father Ahmad Khan led a colony from Mochh, the high bank parent settlement of his clan, and clearing land made a home for himself and his friends in the midst of the jungle, until one night the Sikhs swept down, killed his father, and burnt the whole hamlet; how after a year or two he propitiated the *kardar*, resettled the deserted hamlet, and continued extending his area until in 1856-57 the bounds of his village were demarcated. Similarly Hasan Khan, Isa Khel, whose village paid Rs. 3,840 in 1873-74 tells how having been robbed of his inheritance by his kinsmen, his father and uncle and himself sought safety and a new home in the jungle across the river. Established there, they were attacked in turn by both Watta Khels and Taja Khels; were finally

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expelled by the Sikhs, and with their co-squatters, for several years sought shelter away south in Bhakra, and at last having made their peace returned to their jungle hamlet. Such was the *kacha* with the exception of the divided and cultivated lands immediately under the high banks about 1850; and being such, it is regrettable that on annexation the greater part was not declared Government property, and recent cultivators Crown-tenants. Had this course been followed, Government would have been the owner of a valuable tract, and the people would have been saved from the harass of never ending litigation.

Kacha tenures from annexation to the first Summary Settlement.

For the first four years of our rule, our officials had no leisure to inquire into tenures. During that period an immense area was brought under cultivation, and many new hamlets took root. In 1853-54 a Summary Settlement was made. Whilst it was in progress, the claims of old established communities on the Mianwali side to levy what they called *khutti* (*malikana* or proprietary dues) from lately founded villages were investigated. It was found that many villages had never paid any *khutti*, that no fixed rate had ever existed, as the amount varied with the relative power of the two parties,—*khutti* itself being in fact a forced grain contribution extorted by strength from weakness, that Sayads had been exempted from payment, that *khutti* was sometimes taken by an individual, sometimes by a clan, and that the boundaries of the different so-called tribal domains were disputed. In the end most claims were disallowed, and where allowed, as they were for all the villages within Taja Khel limits and those of the Piplan *ilaka* (Bhakra excepted) in the south of Mianwali, a cash percentage on the revenue was imposed and grain rates abolished. The Taja Khels received an uniform rate of 3 per cent., and the Biluches and others of the Piplan *ilaka* Re. 1-12-0 per cent. on the revenue. For villages in which the founder or leader of the colony (*bunyaddar*) was a Taja Khel or Sayad, half of the percentage went to such founder, and half to the Taja Khel clan, in ancestral shares. Sayads and Taja Khel squatters paid, as such, the founder's share only. In other cases the whole percentage went to the Taja Khel clan. In the Piplan *ilaka* the whole percentage went to the proprietary family. Thus all family or tribal claims over lately settled villages were either compounded for or dismissed. In every other respect every squatter was full proprietor of his holding, and could extend it at pleasure. Any man, who had broken waste, was within Taja Khel limits entered as being a *butamar asami* or *malguzar*, both terms vague as to status; and south of such limits generally as a full proprietor. The founders were always made *lambardars*, and in this latter capacity had the management of the waste. South of Kundi, within Diwan Sawan Mal's former jurisdiction, certain families were regarded as having a right once for all to a small proprietary fee (*jhuri*) when a cultivator broke up jungle land. But nowhere had the recipients of fees (where maintained), whether *khutti* or *jhuri* or *sol-satarhwin*, any clear authority for prohibiting cultivators from extending their cultivated area. The object of investing founders or rather *lambardars* with the management of waste was to promote self-government, and exclude outsiders if the community so willed. On the Isa Khel side no pretence was made of making an inquiry into tenures at the first Summary Settlement. The Isa Khel *kacha* was not extensive at the best, and very little of it was at the time above water, as the main force of the Indus was then pressing towards its right bank. Such lands as were not yet submerged, south at least of Trag, were mostly old lands in a part of the

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canal irrigated upland tract held directly on ancestral shares. But the rise and supremacy of one particular section of the Zakku Khels, and more especially of Umar Khan's family in that section, had given a shock to the old law of devolution, and encouraged individuals to grasp all they could. However there was little for them to grasp at, as most of the *kacha* belonging to the Isa Khel Tahsil at the time of the first Summary Settlement was under water. In both Mianwali and Isa Khel all the estates at any distance from the high bank, which had been settled in the preceding twenty years, were roughly classed as *butamari*. By this was meant that the breaking up of waste conferred a proprietary title.

Growth of *kacha* tenures from second Summary Settlement to 1872.

Second Summary Settlements were undertaken in 1857-58 for Isa Khel and in 1860-61 for Mianwali, and it was not until about those dates that village boundaries were generally demarcated, hence the most energetic communities rightly received the largest areas. In the interval between the first and the second settlements, many of the poorer squatters had sunk to the position of tenants paying in kind. Fixed assessments, coupled with the uncertain action of the river, had driven them to abandon their holdings, or compound with their *lambardars* or others for the payment of the revenue in kind instead of cash. Besides this those who had been entrusted with the management of the waste, and who were generally shrewd, energetic men, had turned that management to good account for themselves, and were now large landholders. The 1857 to 1861 settlements did little more than repeat what had been done in 1853-54. There was no inquiry into rights. The cultivating classes in Mianwali were generally settled with indiscriminately, whether recorded as occupancy or non-occupancy tenants or as inferior or full proprietors, and the Re. 1-12-0 and Rs. 3 per cent. *khutti* dues mentioned above were raised to Rs. 6 per cent. and divided in the same way as before. In Isa Khel there was little revenue-paying land, hence it was thought enough to give leases to *lambardars* and frame no other record at all. Whilst the settlements were being made, the Indus was shifting over to its Mianwali side. This change affected every holding, and, as the assessments were still fixed, poor cultivators, who had been settled with had no alternative but to abandon their lands or arrange with richer men for the payment of their revenue, and thereby commence a connection which has in most cases ended by reducing them to tenants. As the river shifted a general scramble ensued for its forsaken bed, most of which was after much litigation secured, and rightly so, by Isa Khel villages. The lands in the south, some of which had once been canal-irrigated, were mostly obtained by the whole clan, and the more distant lands by Umar Khan's descendants. The Deputy Commissioner too stepped in and appropriated a share for Government, in all about 11,000 acres, of which now only one compact portion of 2,772 acres remains as Government property. But the changes caused by the reversion of the Indus to the Mianwali side were so tremendous, that it soon became an impossibility to maintain fixed assessments, and so between 1862 and 1864 a fluctuating system of assessment was introduced. This saved needy cultivators from the necessity of further relieving themselves from the responsibilities attaching to their position as revenue payers, and gave a great impulse to cultivation. The managers of waste everywhere strained their powers to the utmost, and by importing tenants, and clearing land, and other means, acquired for themselves what they could to the total or partial exclusion of their co-squatters. Knowing that a Regular Settlement was at hand, and aware of the ambiguous

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entries in the Summary Settlement Records, the most sagacious *lambardars* and colony leaders (*bunyaddars*), or their successors strengthened themselves by inducing many of the cultivators to formally acknowledge themselves to have no higher status than that of tenants-at-will or at most occupancy tenants.

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Kacha tenures under the Regular Settlement.

When at length the Regular Settlement did come, the two burning questions related to the status of those who had cleared waste, and whether they or the colony leaders had the right to clear what remained. As to the former, it was evident that in the newer villages the founders had for years bid, so to say, against each other for cultivators, until a period arrived when waste became scarce and valuable, and tenants competed against each other for permission to cultivate it. The supposed transition year was fixed for each village; up to which anyone who had cleared jungle was declared to have thereby acquired occupancy or superior right, the precise status depending on Summary Settlement entries, form in which revenue or rent had been paid, &c.; whilst those who had settled subsequently were held to be tenants-at-will. The year so fixed differed for different villages, but was somewhere between 1861 and 1867. As to the second question, it was found that the area of the still unappropriated waste, except here and there in the actual channel of the Indus, was nowhere extensive. The right to cultivate what remained was generally declared to appertain to the founder or his representatives. In a few cases, *e.g.*, Ban Mahe, an allotment of waste was made to the body of the inferior proprietors, before the rest was declared to be at the founder's disposal. In the case of the Isa Khel *kacha* south of Trag the question of proprietary right was not an easy one to decide. Most of the land had re-appeared after 1861, and the lease-holders, the cultivators and the Isa Khel clan had all some grounds to claim. The latter had the best for all land which had a century before been on the high-bank and canal-irrigated. The period of erosion was seventy or more years ago, and the date of emergence was in all cases recent. In the end the clan secured for itself on ancestral shares most of the *kacha* of the villages of Kundal, Atak Paniala, Kacha Nur Zaman Shah and Khaglanwala. The 'Khawanin' succeeded in retaining more outlying estates. Many *kacha* proprietors, besides several of the 'Khawanin,' have now handsome and well-secured properties, though twenty years ago their rights were little superior to those of their co-settlers. Of the occupancy tenants a large majority have been recorded as having a right to recover their holdings in the same way as a full proprietor can, on the re-appearance of land on the same site after any period of submersion or erosion. There was no custom to the contrary, and it would have been unfair to the descendants of the old Jat graziers of the *kacha* not to safeguard to them such a privilege. Moreover it is an established principle of law that mere submersion does not alter the ownership of land, and that 'tenancy with a right of occupancy is just as much ownership in its way, and as far as it goes, as any other right of property. It is a dismemberment of the proprietary right.' Those who hold by agreement are mostly the *butamars*, who would have been made inferior or full proprietors of their holdings had they not admitted in writing that they were of a lower status. It must be acknowledged that the *kacha* tenures are complicated; but considering the past history of the tract it would have been impossible to have made them simpler, and yet been just to its ancient Jat inhabitants, who loosely owned the *kacha* before the influx of Niazais and Sayads.

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Mianwali upland tenures.

Mohar and Danda tenures.

The Mianwali upland tracts are three, the Mohar and Danda villages to the north, which receive the drainage from the western side of the Salt Range, and which are mostly owned by Niazai Pathans, the Thal proper to the south held by Jats and miscellaneous communities, and the Pakhar *ilaka* east of the Salt Range owned by Awans. It will be necessary briefly to mention the form of proprietary right in each.

Each of the existing Pathan communities settled independently. Land being plentiful, and cultivators few, no regular partition seems ever to have been made. Each family squatted and cultivated where it chose. But as soon as the available area had all been loosely appropriated, regular partition became the rule, and holdings began to devolve in equal shares to sons. Thus much of the land now appears *pattiwand*, the shareholders in each *patti* being descended from a common ancestor, and collectively known by his name. As with the land so with the hill torrent water. But owing to its limited supply, the difficulty of dividing it, and the almost excusable greed of the upstream holders, the general rule now approaches one of *saroba-paina, i.e.*, of highest first, and lowest last. But in many cases the size and position of dams or training spurs, and the share of water each is meant to intercept, have been determined by civil suit. Similarly, in many families, a like result has been amicably attained, and been entered in the Settlement Record.

Thal tenures.

In the Thal both communities and individuals acquired their exclusive rights by squatting. Until boundaries of estates were laid down in 1856-57 Government had a better claim to all outlying waste than any of the villages within whose limits it was measured. To the south, whoever sunk a well became *de facto* regarded as the proprietor of the culturable area around it, and of a sufficiency of grazing waste as well for the pasturage of his plough oxen. Every member of the so-called village had a right to sink a well, and sometimes outsiders did so too with or without the permission of the sub-divisional officer. This was the practice until a few years after the second summary settlement. To the above general rule there is one exception. The lands immediately surrounding Wan Bhachran were acquired about one hundred years since by a Bandial chief named Malik Surkhru progenitor of the present Maliks. He built a fort there, and each workman was recompensed with a strip of land adjoining it. The land so allotted was called *thobiwand*, *thobi* meaning as much earth as a man can raise in his two hands. Theoretically all the rest of the land was at the disposal of the chief, and after him of his descendants. But the colonists soon proved too strong for them, and broke up new land in all directions. After annexation the then chiefs, two brothers named Maliks Sardar Khan and Ahmadyar Khan, instead of combining against the encroachments of the men of their village, opposed each other, and much litigation ensued. At the 1st Regular Settlement an endeavour was made to rehabilitate the family by recording all unappropriated lands in the names of the two heads of the house. As to the Wan Bhachran waste south of the high road and elsewhere, what then remained was recorded as *shamilat deh*. This has been subsequently partitioned.

Tenures in the Pakhar *ilaka*.

Awans have owned the Pakhar tract since, it is alleged, the time of Sultan Mahmud. It is divided into five large and two small villages. The way in which the Kalabagh chief acquired Masan and Nikki is described below. In Thammewali and to some extent in Chakrala, the two large central villages, one family obtained predominance in Sikh times, and made itself proprietor of

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nearly the whole of the former village, and about one-fifth of the latter. After long litigation the custom of primogeniture was ruled to obtain in the family. With the above exceptions the holdings in the tract are not large and possession is the sole measure of right. For years after annexation any villager who chose seems to have brought waste under the plough and became thereby the proprietor. In Sikh times cultivation was not extensive, as there was no security for life and property, and owing to the irregularity of the ground, much labour was required to level a plot and divert water on to it.

Occupancy rights in Nikki and Masan.

Nikki is an outlying village in Pakhar, and has had a chequered history. When the Sikhs early in this century pushed their conquest to the Indus, they found the Awan occupants of Masan and Nikki in very weak and divided state. Neither village possessed any strong man. The former was managed by the Kalabagh chief, who had already so established his hold over its few scattered hamlets as to be regarded as its proprietor. In the latter, internal and external feuds had stripped the leading Karmali Khel family of all real authority, thus giving their powerful kinsman, who held Masan, an opportunity to thrust himself into a dominant position. The Sikhs made over both tracts, villages they could hardly be called, to a *jagirdar,* who after a time entrusted the realization of his dues to the Kalabagh chief, allowing him the usual fee of one-fourth of the collections. This was about 1822. From that date until annexation the men of Nikki paid one-fourth produce, and the Kalabagh collector became their patron and quasi-landlord. After annexation the proprietary right to the village was disputed by three parties, the Kalabagh chief, the hereditary peasant cultivators, and the descendants of the old resident Karmali Khel family. The latter's claim was very weak and easily dismissable. Until the Regular Settlement, the two former never brought the question at issue between them fairly into court. The cultivators were weak and short-sighted, the chief strong and astute enough to see that every year's delay in the determination of his status strengthened his position. Every disagreement ended in a compromise, until in 1862 many of the villagers loosely agreed to pay one-third grain and call themselves occupancy tenants. But still the dispute continued, the one party periodically complaining of exactions and petitioning for the fixation of a money demand, and the other year by year riveting his hold on the village. At last, during the 1st Regular Settlement, the villagers sued boldly for proprietary rights and, after considerable litigation, some of the cultivators were declared entitled to occupancy rights with certain restrictive conditions. In Masan, the Kalabagh chief's *jagir* village, tenant rights have been determined on much the same grounds, but the number of occupancy tenants there is not large.

Alluvion and diluvion.

Regarding alluvion and diluvion the following further extract from Mr. Thorburn's Settlement Report illustrates the custom—

Another important work was the making of arrangements for the partition of Mianwali *kacha* now under water. I have in a former chapter explained how between 1856 and 1868 an enormous area of Mianwali *kacha* was destroyed by fluvial action. The right to new alluvion, as it formed, was always contested in court. The rule throughout the whole *kacha* for both villages and individual holdings was, and is, once a boundary always a boundary, whether the area be above or below water. Thus, wherever land appeared, numerous claimants started up asserting that it had formed on the site of an

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old possession of theirs. There being no field maps, judgments were both very arbitrary and haphazard. In the 1873-74 measurements of this Settlement, individual rights in 92,388 acres belonging to thirty-six villages could not be shown in the field maps, the land being under water. I explained to the communities concerned the necessity of making some arrangements for the partition of such plots on their re-appearance, in order to check future litigation and ensure justice. All the villages agreed, and, treating the submerged areas as if held in joint ownership, proceeded under the supervision of the Superintendent to effect their partition. The result is that the whole area has been mapped, and divided in such a way that each shareholder will receive his allotted portion as it re-appears without having first to litigate for it. In the case of four villages the basis of division has been former field maps. But for the other thirty-two those interested have mostly divided their submerged lands into blocks or strips according to their proportionate shares, the area to be allotted to individuals in each being recorded and no more. That area is generally for an occupancy tenant, inferior or full proprietor, the maximum acreage entered in any one year in his name either at the first or the second Summary Settlement, or in any of the subsequent annual measurements under the fluctuating system of assessment. The balance, if any, has been recorded in one or more plots in the names of the founders (*bunyáddárs*) or as *shamilát-deh*, as the case may be.

Description of tenures at second Regular Settlement in Isa Khel and Mianwali Tahsils.

The extacts above given indicate the history of tenures in the Mianwali and Isa Khel Tahsils down to the first Regular Settlement in 1878, and the following extract from the Assessment Report on these two tahsils written by Rai Bahadur Pandit Hari Kishan Kaul, C.I.E., in 1907 will serve to bring the account up to date :—

The following table classifies villages according to their existing tenures :—

Description of tenure.	Mianwali.				Isa Khel.				
	Khudri.	Pakka.	Kacha.	Total.	Bhangi Khel.	Pakka.	Nahri.	Kacha.	Total.
Bhayyachara complete ...	8	11	28	47	1	4	11	15	31
Bhayyachara incomplete ...	7	26	25	58	1	20	1	8	30
Zamindari Khalis ...	1	6	4	12	...	...	...	1	1
Zamindari communal ...	...	...	1	1	...	1	...	2	3
Pattidari (complete) ...	...	...	...	...	...	1	...	...	1
Total ...	16	44	58	118	2	26	12	26	66

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The process of disintegration has been at work. Villages having common land are gradually dividing it up and are thus drifting slowly to the commonest Punjab tenure of *bhayyachara* which is now the prevailing form of tenure here with the exception of a few *zamindari* villages owned by single individuals or families. There is just one *pattidari* village which has come into existence owing to the amalgamation of two estates which had a common map with fields mixed up. Inside the *bhayyachara* village, proprietary rights were arranged at last Settlement by *warhis* or groups of landowners supposed to have descended long ago from a common ancestor. These lands belonging to a *warhi* did not, like those of a *patti*, occur in one block, but were scattered all over the place, and the groups have by frequent transfers of plots of land and the introduction of foreign elements, practically lost the communal tie. The arrangement has therefore been abandoned except where the *warhis* had their separate common lands. In a few villages at the south of the Isa Khel Tahsil, the area was divided into large blocks called *tals*, before colonization was commenced by the Niazis, but individuals have by lapse of time come to possess land in more *tals* than one. The land tenures in the Mianwali Tahsil are not very complicated. The landlord is usually a full proprietor ploughing up his own land or working through tenants with or without rights of occupancy. In rather more than ½ of the *kacha* and in a few villages of the *pakka*, there are *ala maliks* (superior proprietors) receiving 6 per cent. or more of the land revenue from *adna maliks* (inferior proprietors), who are responsible for the payment of land revenue and the arrangement for cultivation. There are conditional tenants in Khudri and the submontane part of the *pakka*, who cleared the land and built the embankments, and, although treated merely as tenants-at-will, are yet not liable to ejectment as long as they maintain the embankments or until they have been paid compensation for their trouble in breaking up the land. Similar tenants who cleared land in the *kacha* are known as *butemars*. The landlord sometimes mortgages the right of cultivation to a tenant charging a premium which has to be repaid before the tenant can be ejected. The land tenures of the Isa Khel Tahsil are very complex indeed. There are *ala maliks* in the *pakka* and *kacha* receiving Rs. 6, 6-4-0 or 25 per cent. of land revenue from the *adna maliks* who pay land revenue, or taking $\frac{1}{10}$th of the divisible produce from the common heap as *khutti*. There is little difference between the *adna maliks* paying 25 per cent. of land revenue or $\frac{1}{10}$th of produce and occupancy tenants who pay rent at about the same rates in addition to land revenue. Then there are *butemar* and *manjhemar* tenants who have cleared the waste or have built embankments or levelled the land and cannot be ejected without the payment of compensation and can sell or mortgage their rights. They generally pay $\frac{1}{10}$th of the produce as *khutti* besides the land revenue. In this tahsil there is a peculiar way of transferring rights in land in several bits. A full proprietor, for instance, will mortgage or sell his superior proprietary right (*i.e.*, *khutti*) to one person, his inferior proprietary right (*mahsul*) to another and right of cultivation (*haqqkasht*) with or without rights of occupancy to a third. This not only leads to multiplication of the number of mutations to be attested, but considerably complicates matters at times. The tenure elsewhere called "*Vallwin Lichh*", where a landlord mortgages his land, but retains the right of receiving a small share of the produce as the real proprietor, or where a man takes land on mortgage, but in order to escape

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the strictures of the *Maulavis* for recovering its produce by way of interest, agrees to pay a small portion of it to the mortgagor, is not uncommon either. The most complicated tenures are to be met with on the canal irrigated lands.

Village communities and tenures—Description of tenures of second Regular Settlement in Isa Khel and Mianwali Tahsils.

In more than one-sixth of the Nahri circle, the old system of canal irrigation has resulted in the partition of every proprietor's land into three bits, one-half being retained by the *sijji*, three-eighths going to the *waku*, and one-eighth to the *mashki*. The *mashkis* are treated as sub-proprietors liable to ejectment in case of failure to provide water for the *sijji's* half of the land. *Wakus* are recorded as tenants under the *mashki* and are of two kinds—(1) conditional, who are not liable to ejectment as long as they continue to clear the canal and can transfer their rights; and (2) at will, who can be ejected on completion of the agricultural year during which they effect the canal clearance. The *mashki* and *waku* pay the land revenue of their bits of land, the *mashki* being responsible for payment of the revenue due from his tenant, the *waku*.

Tenures in the Bhakkar Tahsil.

Tenures in the Bhakkar Tahsil are very fully described in the settlement report of the old Dera Ismail Khan District by Mr. Tucker, from which the following extracts are taken without material alteration:—

In describing the double proprietary tenure as it exists, in the cis-Indus Tahsils I cannot do better than quote from the accounts of it given by Captain Mackenzie, who writes as follows:—

Settlement of the tract, and allotment of *hads*.

"When the Qureshis and Ghazi Khan's four sons first came into the country, I have mentioned that they brought with them a miscellaneous body of emigrants, through whom, doubtless, they expected to be able to make their enterprise profitable. There were Sayads, Biluches, Jats and other adventurers in their train. Land was practically unlimited in extent: a virgin soil open to appropriation by the new comers at will; to them accordingly it was apportioned by the Captains of the bands, in large lots, within whose limits it was in the power, as it was also the interest, of each grantee to do what he could in the way of agricultural improvement. This class have always retained their lordship of the manors. They have always maintained a tangible superiority, and have, therefore, been recognized by us as owners of landed rights superior to all other superior proprietors.

Causes which led to the preservation of the rights of the superior proprietors.

"In other parts of the country also, we have found classes of men who, although we have been unable fully to recognize their claims to superiority, must at some time or other have corresponded to this class of superior proprietors. In those places they had harder times to contend with than here, with a denser population, rooted, like us all, to their homes; the necessity of forbearance was not in their cases forced upon their oppressive rulers. So long as that point, beyond which abandonment would commence, was not overshot, few Governments had existed which did not exact everything which the actual cultivator could produce and yet live, or if in the darkest times the people were obliged to flee from their homes they always returned when a ray of light made it appear possible to do so. Throughout those ages the original owners, superior proprietors of the soil, were unable to reserve for themselves any seignorage or token of fiefship from the subordinate classes on the property, or they were obliged to associate those classes on equal terms with

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in which inferior proprietary rights had at various times been acquired by payment of *jhuri*, &c., was not separately shown. Rights in such lands, which include large numbers of abandoned wells, have now for the first time been recorded. Most of the old fallow was also omitted at Captain Mackenzie's Settlement. With these exceptions, Captain Mackenzie's records, which included carefully compiled administration papers, were very complete in form, and subsequent experience has shown them to have been very correct in their facts.

Theory that payment of *jhuri* was necessary to status of *adna malik*.

At both Mr. Simson's and Captain Mackenzie's Settlements the theory was, that those only who had paid *jhuri* were entitled to the status of *adna malik*. In the same way it was laid down by Captain Mackenzie that persons breaking up waste, for the future, would become *adna maliks* of the lands cleared by them, provided the *ala maliks* agreed to take *jhuri*, otherwise they would be occupancy tenants only. Practically heaps of cultivators were recorded *adna maliks*, who had never paid *jhuri;* and in the same way, the provisions in the administration papers for the payment of *jhuri* for new lands were in many villages disregarded; or *jhuri* was paid, and the holders were nevertheless recorded *adna maliks* in the annual papers. In some villages it was acknowledged from the first, and recorded in the Summary Settlement papers, that there was no custom of *jhuri*, and that *adna malkiyat* was acquired simply by clearing the waste.

Custom not universal, even cis-Indus.

Summary Settlement arrangements have now been adhered to, except in a few special cases.

At the present Settlement, cultivators already recorded as *adna maliks* either in the Summary Settlement or in the patwari's papers, have almost invariably been continued as such, and their right to the status has seldom been disputed. In some of the *batai* and *pathin* paying villages, where the cultivators had been recorded occupancy tenants, vehement claims were put forward by them to the higher status of *adna malik*. As a rule it was considered that their claim was not sufficiently strong to warrant a change in the arrangements made at the Summary Settlement.

Responsibility of superior and inferior proprietors for the revenue demand, cis-Indus. Profits from new cultivation.

As regards the payment of the Government revenue in the cis-Indus tahsils, the *ala maliks* and *adna maliks* are jointly responsible in proportion to the revenue assessed on the lands held by them in *adna malkiyat*. Hitherto the *adna maliks* have shared in the profits from new cultivation, but these profits, since the introduction of the fluctuating system, will go, except in the case of the Thal revenue and of the *abiana* on wells in the Kachi, to the Government and not to the proprietors.

Rules for breaking up waste and payment of *jhuri* under the expiring Settlement.

As regards the cultivation of waste lands, the rules laid down at Captain Mackenzie's Settlement were, that the *ala malik* had a preferential right to cultivate the waste lands on the estate, but that he could not refuse to allow an *adna malik* to cultivate waste land, in the capacity, as to it, of tenant, and provided that there was no prior claim on account of contiguity to the *ala malik's* own occupancies. Any person, *adna malik* or outsider, from whom the *ala maliks* accepted *jhuri*, became forthwith *adna malik* of the plot for which such *jhuri* had been paid, but the taking of *jhuri* was left optional with the *ala maliks*. *Ala maliks* themselves breaking up waste become *adna maliks* of such lands without payment of *jhuri* to the exclusion of the other sharers in the *ala malkiyat*, and on partitioning the *ala malkiyat*, such *ala maliks* retained their *adna malkiyat*, in the same way as any

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Waste broken up by *ala maliks* is held by them independently of their superior proprietary shares.

malik adna. I mean to say that at a partition of the *ala malkiyat,* no sharer could claim a re-distribution of the *adna malkiyat* held by the parties in accordance with the superior proprietary shares, when such *adna malkiyat* had been in the first instance separately acquired by *butimari.* For instance, the *ala malkiyat* of an estate of 600 acres is held undivided on equal shares by four brothers, of whom the eldest, Gaman, is lambardar. These men have divided their ancestral inferior proprietary holding of 60 acres, each getting 15 acres; Gaman, being well-to-do, has broken up 35 acres more, increasing his holding to 50 acres. The other brothers have broken up only 15 acres each, and have holdings of only 30 acres. At a partition, the younger brothers will have no claim to equalisation of the *adna malkiyat* because, as regards their additional lands, each brother holds to the rest the position of an ordinary *adna malik.*

Power exercised by lambardars in allotting waste lands for cultivation, &c.

Since Captain Mackenzie's Settlement, the value of waste lands has risen greatly, while their area has decreased, owing to extension of cultivation. Under the old arrangements the lambardars have represented the superior proprietary body in allotting waste lands for cultivation, which is the most valuable part of the *ala malkiyat.* Not only would a lambardar cultivate all the best lands himself, of which as *ala malik* he became *adna malik* without paying *jhuri,* but he took large sums of *jhuri* from *adnas* and others, crediting nothing or very little to the common fund of the *ala maliks.* The poorer sharers, feeling themselves aggrieved, were perpetually putting in claims for partition. Now in villages of this sort, partitions confuse the accounts greatly. An *adna malik,* instead of paying *malikana* on his holding in a lump, has to pay it separately for the lands included in each of the *pattis,* into which the village has been divided. A village, besides, is better managed, when held by a single lambardar, than when there are a number of *ala maliks,* each in possession of his own strip, and anxious to wring out the highest terms he can before giving out waste for cultivation. My great endeavour, therefore, has been to frame rules by which the rights of the poorer sharers will be protected and the necessity for partition avoided. Partition of the *ala malkiyat* has always been treated here as a measure of an administrative character, to which sanction is by no means accorded as a matter of course, as in the case of ordinary proprietary holdings.

Leads to the poorer sharers demanding partition.

Objections to minute partitions of the *ala malkiyat.*

Rules now laid down for management of the *shamilat* waste.

The following rules have now been laid down with the general consent of the whole body of superior proprietors:—

1st. Partitions not ordinarily to be allowed. Right of *adnas* reserved in partition.

1st. The *ala malkiyat* is not ordinarily to be partitioned, though such partition may be allowed for sufficient reasons. In case of partition, the rights of the *adna maliks* through the common lands of the whole village will be continued as before. For instance, an *adna malik* will continue to graze his cattle and to break up waste in all the *pattis* into which a *mauzah* may be divided.

2nd. Prior right of *ala maliks* to cultivate.

2nd. The *ala maliks* will have a prior right to cultivate waste, and after them the *adnas*; failing these the *ala maliks* may give lands to outsiders to cultivate.

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themselves for purposes of common defence. But here a more lenient course was imposed on the ruling powers: to have treated these superior proprietors with anything but great forbearance and liberality, would at once have stopped the improvement aimed at, of the almost boundless untitled prairie, or mayhap thrown them back to their pristine solitude. And hence to the comparative recency of civilization, and to the continued scantiness of population, does this class (so I conceive) owe the maintenance of its superior position here."

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Status of the other proprietary classes.

Inferior proprietary right acquired by payment of *jhuri*.

"The other classes owe what is peculiar in their position to the same causes. The superior proprietors could only attract new settlers by liberal terms. They therefore parted with the heritable and transferable rights in the land in their several beats, in small plots, to new cultivators, upon the payment by them of an entrance fee, under the name of *jhuri* and an annual payment of *malikana*. These conditions fulfilled, the superiors reserved nothing but some slight reversionary interest in the land thus conveyed. The right of pasturage and the appropriation of such produce in the waste, as might be necessary to these new occupants in their position on the estate, was also conceded. Subject therefore to the burden of *malikana* only, this class can dispose of their holdings in any manner they please, and are therefore proprietors, although of an inferior kind."

Occupancy rights acquired by clearing waste. *Butimars*.

"A third class also exists. When the new settler was too poor, or when it was otherwise unsuitable for him to pay the *jhuri* fee, a superior proprietor would frequently mark off a plot for him to cultivate, merely stipulating that he should have a hereditary, but not a transferable, right in the land upon bringing it into cultivation, and paying annual *malikana*. This class is denominated *Butimar*. They are chiefly to be found in the low alluvial lands, where it is not worth while, owing to its light and inferior quality, or to its instability, to buy the land by payment of *jhuri*, and so become an inferior proprietor."

Stress laid by Captain Mackenzie on payment of *jhuri*.

Captain Mackenzie in this classification lays great weight on the payment of *jhuri*, as being the distinguishing point between the *adna malik* and the mere *butimar* tenant. The distinction, however, even in the cis-Indus Kachi, is not so clearly marked as it would appear to be at first sight, and trans-Indus, where the custom of *jhuri* hardly exists, it can seldom be taken as a criterion in deciding questions of status. Before discussing this question further, it will be better to give a short account of the proceedings of the earlier Summary Settlements, and to show how the classification, described by Captain Mackenzie, was gradually brought about.

Origin of the state of tenures described by Captain Mackenzie. Classification of tenures at the first Summary Settlement. Nature of this Settlement.

As I have mentioned, the Government revenue, previous to annexation, was generally taken in kind, the superior proprietors, then known as *zemindars*, getting *pai path*, and sometimes an uncertain amount of grain under the name of *jholi*. The first Summary Settlement was effected by Captain Hollings in 1850. Captain Hollings made the Settlement with the superior proprietors. Little enquiry was made into subordinate rights, or as to the way in which the revenue was to be paid. The revenue under Captain Hollings' Settlement was sometimes collected from the cultivators in cash; sometimes by the *Pathin* system; and sometimes the superior proprietors took *batai* based on the old Government *mahsul*. Under the *Pathin* system the whole crop of the village is collected together, the grain is meassured, the calculation being in *paths*; the incidence of the revenue per *path*

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is then made out, and each cultivator has to pay up his quota in proportion to the amount of his individual grain-heap. This system throws more power into the hands of the lambardars than would at first sight be supposed. The system is simple enough, provided there is always a good harvest, but when the harvest is short, the whole of it would often be insufficient to cover the Government demand. This is generally the case with the *kharif* instalments. The lambardar therefore has to decide what is a reasonable amount to take. He either advances the balance himself, or borrows from a *banya*, and postpones the actual collection from the cultivators till the next harvest. In consequence of this, there is always a sort of running account between the lambardar and the cultivators, the latter being very much in the hands of the former.

Mr. Simson's classification into *zemindars*, *chakdars*, and tenants. Their position.

At the Summary Settlement of 1854, Mr. Simson classified the classes connected with the land as *zemindars*, *chakdars* and *tenants*. The two former represent the present *ala maliks* and *adna maliks*, names which were first introduced at Captain Mackenzie's Settlement. As a rule, those persons were recorded as *adna maliks* who had paid *jhuri*. These were given a cash assessment plus Re. 1-12-0 per cent. *malikana*. A cash settlement with a higher rate of *malikana*, varying from 20 to 35 per cent. inclusive of cesses, was generally assessed on occupancy tenants, but in many villages, the old *Pathin* and *batai* systems were continued. No *batai*-paying cultivators were ever recorded as *adna maliks*, though sometimes cultivators paying at *adna* rates, *viz.*, cash revenue plus Re. 1-12-0 *malikana* were recorded as occupancy tenants.

Some slight changes made at Settlement of 1862.

The record of rights prepared at the Summary Settlement of 1862 agreed generally with Mr. Simson's, but a good number of Mr. Simson's occupancy tenants were promoted to the grade of *adna malik*. In some villages the method of collecting the revenue was changed, *batai* or the *Pathin* system being substituted for cash assessments.

Character of the Summary Settlement records.

It will be well to describe here the nature of the records prepared at the Summary Settlements.

Captain Holling's records.

Captain Holling's records were very brief. No details of area were given, but a statement was prepared showing the names of the *khewatdars*, and the *jama* to be paid by each. There were also a few general remarks as to the *batai* arrangements in force.

Mr. Simson's records.

Mr. Simson's records consisted of a *khasrah* of all cultivated fields, a *muntakhib* or abstract of holdings, and a *khewat* showing the distribution of the *jama*. No administration papers were prepared, and there were no field maps, so that the *khasrahs*, though giving dimensions and areas of fields, were of little use for future reference. The records were rough in form, but very good in quality, and formed a reliable basis for the more detailed records prepared by Captain Mackenzie.

Captain Mackenzie's records of rights. Otherwise complete, but no field maps.

Captain Mackenzie's Settlement, though nominally a Summary Settlement, was, as he himself writes, on as good a basis practically as a Regular Settlement. There were, however, no field maps; and neither at Mr. Simson's nor at Captain Mackenzie's Settlements, was any measurement made of the waste, or even of long abandoned lands. Owing to this cause, a large area,

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their old holdings. A fixed rate of *jhuri* has been laid down for such lands, on payment of which the *ex-adna malik* will become entitled to his old status in his new holding, and it will not be optional with the *ala maliks* to refuse to accept such *jhuri* when offered. This arrangement has been generally accepted without demur. The rate of compulsory *jhuri* has been fixed for most villages at Re. 1 an acre. If an *ex-adna malik* comes forward, when a tract of common land becomes fit for cultivation, he will be entitled to an allotment ; but if he delays to apply till the lands have been allotted out to others, he will have no claim against either the holders or the lambardar, and must wait till some fresh lands are formed in some other part of the *mauza*. The allotment of such waste lands will, as now, remain very much in the hands of the lambardar and of the *ala maliks*, but the clause will hang over them *in terrorem*, and be an inducement to the lambardars to re-allot such newly formed lands in accordance with the old constitution of their villages. The gradual disappearance of the *adna malik* class will, at any rate for a time, be prevented, while the provision for the payment of additional *jhuri* gives the *ala maliks* as much as, in my opinion, they can justly claim. These rules will not affect the claim of *adna maliks* or occupancy tenants to recover portions of plots lost by diluvion, where fresh lands are thrown up adjoining the remaining portions of the original plots. The rights of occupancy tenants cease altogether when the whole of a plot held by them is washed away.

These rules, though generally introduced, have not been universally laid down for all villages.

I have described at length the past and future arrangements for the management of waste lands, which apply principally to Kachi villages, as these are points on which disputes are perpetually occurring. It must be understood that one set of cut and dried rules has not been laid down for all the villages of the tract ; and where the *alas* and *adnas* have jointly agreed to modify them, they have been at full liberty to do so. Similarly, where a contrary practice has been proved, no change has been made in it without general consent.

Right of *adna malkiyat* not forfeited by failure to cultivate.

In some villages, for instance, not subject to diluvion, the acceptance of *jhuri* offered by *adna maliks* for newly cleared lands is compulsory on the *ala maliks*. In others, the rights of *adna maliks* will be terminated by diluvion as completely as those of occupancy tenants. I may mention here one other point connected with the rights of *adna maliks*.

It has been decided, after full inquiry, that by the custom of the country an *adna malik* does not lose his rights by disuse or failure to cultivate, and that he is entitled to recover possession of abandoned lands after any length of time except where adverse possession can be proved against him. The *adna malkiyat* of such lands lapses to the *ala malik* only when the original proprietor disappears leaving no heirs. The *ala malik* cannot claim possession merely because the land has been 8 or 10 years waste.

Modified form of partition suitable for Kachi villages.

As regards claims of members of the superior proprietary body for partition, the rules which have now been framed will, to a great extent, preclude the lambardars from wronging their weaker brethren. Still in some cases it may be found desirable to prevent disputes regarding the allotment of the waste for cultivation by effecting a partial partition. In such cases, the

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existing waste can be divided among the superior proprietary sharers without touching the cultivated lands, and it can be provided that the *malikana* due on the partitioned lands, when these are brought under cultivation, will be paid into the common fund. In this way the right to the *malikana* will continue to be held undivided as before, but each *ala malik* will be able to make his own arrangements for taking *jhuri*, &c., for the lands that may have fallen to his portion. A partition of this sort, though it effectually protects the interests of the sharers claiming partition, is not generally what they care for. The great idea of every *ala malik* is to get a *patti* of his own, with *adna maliks* over whom he can rule, and a share of the lambardari. In old days a division of the *ala malkiyat* almost always meant a division of the lambardari; but the two things by no means go together, and I have always tried to make the people understand that it is bad for the interests both of the Government and of the people for every petty *pattidar* to be put in as a lambardar in his own right.

Main features of the common tenure in the cis-Indus Kachi summed up.

To sum up the system of proprietary right in the cis-Indus Kachi, the country is divided into *hads* generally co-terminous with *mauzahs*; each *had* is owned by a small body of superior proprietors, usually of one family, who hold undivided on shares and less frequently divided on *pattis*. Under these superior proprietors is a mixed body consisting of individual superior proprietors, inferior proprietors, and tenants, who have generally acquired their rights by breaking up waste, and who pay the Government demand on the *bhyachara* system, *i.e.*, in proportion to their holdings. In most of the villages there is a certain amount of *shamilat* waste, which is the property of *ala maliks*, subject to certain rights enjoyed by the other classes of the community. The main features of this tenure are almost universal, though differences in classification are occasioned by local circumstances. In some villages, mostly along the river, there are no *adna maliks*—the *butimars* are all classified as occupancy tenants, and the superior proprietary class become full proprietors holding the whole estate and paying the revenue on shares. The existence of a single *adna malik* in such a village changes the tenure of the *adna malkiyat* from *zemindari* to *bhyachara*. In other cases the inclusion of two separate *hads* in one *mauzah* changes the *ala malkiyat* tenure from *zemindari* to *bhyachara*, though each *had* is individually held on the ordinary *zemindari* tenure.

Rights in the villages in the Bhakkar Thal.

This system of tenure extends throughout the Kachchi tract and that part of the Thal attached to villages, which are half Thal and half Nasheb. In the villages of Haidarabad, and a few others in the Bhakkar Thal, the right of the lambardars to the *ala malkiyat* was recognized at the Summary Settlements. They get therefore the *malikana*. Their title to the *ala malkiyat* was very weak, and in Mankera and other villages there are lambardars with just as good a claim to the status, but whose rights were not admitted. In addition to the *malikana*, the lambardars of Haidarabad, etc., also get the *tappa lagwai*. This is equivalent to the *jhuri* taken in the Kachchi and is taken for new wells. It is called *tappa lagwai* in allusion to the *ala maliks* marking out the spot where the new well is to be constructed. It generally consists of five or ten rupees and a turban, but more than this is now usually taken, the amount varying with the value of the site for the well. In the Thal generally, *tappa lagwai* was originally rather an official *haq*, taken by the lambardar, than a proprietary due. It is often paid to lambardars, even when there is no *ala malkiyat*.

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3rd. Though the *ala maliks* have paid no *jhuri* hitherto, they will pay it in future for any lands that they may clear. There will, however, be this difference between them and the *adna maliks*, that it is optional with the *ala maliks* to take *jhuri* from an *adna malik*, in which case he remains an occupancy tenant only. The individual *ala malik*, on the other hand, will be entitled, if he chooses, to pay *jhuri* at a fair rate, and to thus become an *adna malik*. In such a case the other *ala maliks* will not be able to refuse to take the *jhuri*.

3rd. *Ala maliks* to pay *jhuri* for the future.

4th. The lambardar will not be allowed as before to take *jhuri* on his own authority. The question as to the taking of *jhuri*, or as to its amount, will for the future be determined by the *ala maliks* as a body, and the decision come to be recorded by the patwari.

4th. Amount of *jhuri* to be settled by the proprietors, not by the lambardar alone.

5th. The lambardar will be entrusted with the power of allotting common waste for cultivation. Any persons feeling aggrieved at the way in which he exercises such power, must put in a complaint at once, otherwise persons clearing jungle, with the lambardar's permission, acquire occupancy rights, and will pay rent at the customary village rate to the superior proprietary body.

5th. Powers of the lambardar to allot waste for cultivation.

To acquire the consent of the whole proprietary body before lands can be broken up, would check cultivation and cause much trouble and dispute. Besides this, in the river villages, the arrangements for cultivating newly formed lands have often to be made in a hurry, and there is no time to consult the whole of the proprietors. This power, therefore, has been continued to the lambardar. If he abuses it, he ought, on a continuance of the offence, to be deprived of his office.

Necessary to give the lambardar a certain amount of power in allotting waste.

There is no reason, however, why the *jhuri* should not publicly be fixed so that the lambardar may be given as little room as possible for cheating his co-sharers.

The right to profits from the produce of common waste lands, other than grazing, has been continued to the superior proprietors, subject to the right of the *adna maliks* and cultivators to take first what they want for their own requirements. These jungle products are daily becoming more valuable, and during the last year or two, there have been constant disputes as to the *munj* grass. The *adna maliks* declare that the lambardars and *ala maliks* sell it at the beginning of the season, and do not leave enough for village requirements. The *alas*, on the other hand, charge the *adna maliks* with cutting more than they themselves require, with intent to sell or give away to friends. The cases that have turned up have been settled in two ways. The *ala maliks* have been given the option of taking a third of whatever *munj* grass there may be, leaving the rest to the cultivating body generally, or of leaving the whole to the *adna maliks* till 1st January, after which the *ala maliks* are at liberty to sell the remainder. In neither case are the *adna maliks* at liberty to sell any *munj* grass that they may have cut, or dispose of it to outsiders, hough of course it is difficult for the *ala maliks* to prove cases of the sort gainst them. The increasing value of *munj* grass will, I hope, lead to its

Surplus produce of waste lands, such as *munj*, &c., belongs to the *ala maliks*.

Disputes as to *munj* grass.

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being more extensively cultivated on the lands of individual proprietors; when each man has a plot or two on his own land, these disputes will gradually cease. Owing to the want of preservation of jungle growth on the common lands, and the promiscuous grazing of cattle, the Kachi is getting rapidly denuded, and more exposed to injury from floods. Strips of *munj* grass along the sides of the fields, check the flow of the flood waters, and lead to a deposit of silt. Lands so protected are not impoverished to the same extent as when the country is open, and the jungle growth eaten down.

Right to cut firewood. Fee taken from non-cultivators.

All classes of cultivators are entitled to firewood from the common lands. Non-cultivators, such as traders and artizans, will in future pay 8 annas a year for the privilege of taking grass and wood and *munj* from the common lands. Payments under this head will go to meet the grazing *jama* assessed on such lands, and will not be a perquisite of the *ala maliks*.

Rights of inferior proprietors to recover lands lost by diluvion.

Absence of a defined custom.

Another point which has long been in dispute between the superior and inferior proprietors, and which was not provided for at the Summary Settlement, is the right of the inferior proprietors to recover lands lost by diluvion. According to local custom, the boundaries of superior proprietary *hads* are not affected by river action. Any lands thrown up within the boundary belong to the original *had* proprietors. As regards the *adna malkiyat* there has been no established custom. In the absence of field maps, it was difficult, if not impossible, for *adna maliks* to prove their claim to the particular plots formerly held by them. Practically it has always been more or less the custom for an *adna malik*, whose lands had been lost by diluvion, to get an allotment out of the *shamilat* waste, without reference to the actual position of his old lands. As waste lands are now getting very valuable, the question was one on which a definite decision was necessary. Nothing on the subject is to be found in the administration papers of the Summary Settlement. To treat all new alluvion as the absolute property of the *ala maliks* would in a few years lead to a revolution in the constitution of the river villages. At the same time to lay down a rule, that *adna maliks* are entitled to recover the actual lands formerly held by them, would lead to much trouble and litigation. In the Kachi the holdings of *adna maliks* seldom form compact blocks. Small fields, belonging to a multitude of proprietors, are mixed up together. The changes effected by the Indus are sometimes very violent. A strip of country, half a mile wide, is swept away. Lands are not perhaps thrown up on the same site for five or ten years, and then perhaps not contiguous to the main bank, but in an outlying island. To relay the boundaries of the old holdings in accordance with the original field map in the newly accreted tracts, would be work of the greatest difficulty, and mistakes would continually be occurring. When the lands first became fit to cultivate, many of the old *adna maliks* would be absent. Their holdings would be taken up by others, against whom civil actions for possession would afterwards be brought. Here, again, a sort of compromise has been effected. It has been arranged that the right of *adna maliks* to particular plots will cease, when such lands are lost by diluvion. Such lands, when reformed, will become *shamilat* of the village, and subject to the same conditions as *shamilat* lands generally. *Adna maliks*, however, who have suffered by diluvion, will have a preferential claim to allotments from the *shamilat* to the extent of the lands that they may have lost, without reference to the exact position of

Objections to re-allotting to *adna maliks* lands on the exact site of those originally lost.

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Daggar villages in Bhakkar.

In the Daggar villages, as distinguished from the pastoral villages of the Bhakkar Thal, the tenure is generally very simple. In most of the villages there is no superior proprietary body. A village consists of the group of wells with the surrounding waste. The majority of the wells in each village are owned by men of a single caste, from whom the village is named, such as Daggar Waghwara, or Daggar Lilan. The remaining wells are owned by Hindus and men of miscellaneous tribes. All well-owners are on an equal footing, and the waste is held on *khewat* shares. An idea has been current for a long time past, that the waste lands in the Thal were the property of Government, which could give permission to new settlers to construct wells in a village without consulting the old proprietors. Such a right has undoubtedly been exercised more or less on main lines of road, where wells have been sunk for the convenience of travellers, and in the Great Thal, where proprietary rights in the waste were weak or non-existent. I found, however, on enquiry, that no such right had been generally exercised even in Sikh times in these Daggar villages, and decided that it could not now be claimed by our Government. As I have said, there is generally a leading tribe in each village, and these people are very particular about the boundaries of their *hads,* and object greatly to the intrusion of outsiders. In those Daggar villages, in which there is an *ala malkiyat,* the state of things is similar to what it is in those villages where there is none. These villages have generally been formed out of the outlying lands of old Thal Nasheb *hads.* North of Bhakkar these *hads* used to stretch a long way back into the Thal. In villages like Haji Husain and Mai Roshan, where only one or two wells have been sunk in the outlying Thal lands, the whole *had* still forms a single *mauzah* held directly by the *ala maliks.* The boundaries of these villages run as far back to the east as those of the Daggar villages, which have been formed out of the adjoining *hads* to the south. The outlying wells in these southern *hads* being numerous and generally grouped into well-defined *daggars,* were formed by the Sikhs into separate *mauzahs.* In some the old *ala maliks* retained both the lambardari with right of management and the *malikana.* In others they lost the lambardari and management, but retained the right to *malikana,* while in a third class they have lost their rights altogether.

Right of Government to allow new wells to be sunk in the Thal.

Superior proprietors of Daggar villages.

Rights in the Great Thal Bhakkar.

In the pastoral portion of the Bhakkar Thal, which, for assessment purposes, has been formed into the *Thal Kalan,* or Great Thal circle, village boundaries have now for the first time been clearly laid down. In the villages so formed the tenure differs somewhat from that of the Daggar circle, each proprietor owns his well lands or *barani* plots in severalty as in the Daggar circle; but there are many cattle owners, who though owning no cultivated lands, have an equal right to the waste with the owners of the cultivated lands. The revenue of the grazing lands is paid by a rate on cattle, and its proprietorship cannot therefore be recorded as held on *khewat* shares. These *shamilat* grazing lands are the common property of the residents, but on no recognised shares. Hitherto there has been free grazing through the Thal, and any cattle owner might move at will from one village to another. Though free grazing has now been abolished, nothing has been done to bar a grazier from moving to a new village and permanently settling down there. In such a case he would by the existing custom acquire the same rights as the old residents. It is probable that eventually some sort of exclusive right in these waste lands will spring up, but at present I hardly see on what basis it is to be established. Up to the present Settlement, the waste in these pastoral

Waste lands owned jointly by well-owners and graziers.

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villages has been looked on as the property of Government, subject to the right of the *zemindars* to graze their cattle in it; this right has been shared by the Pawindahs and others. Government has now separated off a portion of the Thal as *rakh*, and given over the remainder in proprietorship to the village communities: the rights of members of these communities as between themselves are at present in a vague state, and I have thought it better to leave them so, rather than invent a tenure for them, which perhaps might not eventually be found to answer.

There are two other descriptions of property in the Thal, rights in which I have not attempted to fix: rights in melon lands, and rights in *jand* trees.

Rights in melon lands.

The melon lands are generally found in the neighbourhood of the hamlets and villages, but sometimes extend for miles into the surrounding waste. These melons are sown in favourable years on the sides of sand hills, and most of the Thal residents have their own particular sand hills, which they have been in the habit of cultivating. Except when the crop is on the ground, there is no trace of cultivation. Nothing is visible but a waste of white sand. There are no stones or other land marks, and to map these lands would be a work of great labour and of but little use. To show these melon lands, the Thal survey would have had to be done on at least a sixteen-inch, instead of a four-inch scale, and owing to the want of field boundaries, it would have been very difficult to locate the fields after the survey had been completed.

Rights in *barani* plots hitherto very weak. Such rights not allowed to interfere with construction of wells.

The rights of holders, not only of melon lands, but also of *barani* lands which grow gram and *moth*, have hitherto been of a vague description. The holders have possessed an occupancy rather than a proprietary right, and such cultivation was not allowed to interfere with the sinking of new wells. A man applied to the Assistant Commissioner in charge at Bhakkar to sink a well in a suitable spot, part of which was held in *barani* cultivation by some one else. If permission was granted as it often was, the *barani* cultivator lost his rights without getting any compensation. In the same way *barani* cultivation has always been carried on more or less in the old Government *rakhs*, though the cultivators have never been admitted to have even an occupancy right. Such lands can be brought under cultivation with little or no labour, and the position of the holders has been correspondingly weak. The *barani* lands have now been carefully measured, and the possessors have been accorded a distinct proprietary right. As regards the melon lands, the following provisions have generally been made with general consent in the administration papers. The *zemindars* are to continue to cultivate melons as before on their old lands, a person failing to cultivate melon lands for three successive years loses his claim to them. As melon cultivation interferes with cattle grazing, it is not to be extended to new lands without general consent. Ordinarily no revenue will be charged on melon cultivation. Should there be a difficulty, however, in meeting the revenue on grazing lands, one anna an acre will be charged on the actual melon cultivation for the year, and will go towards paying the *jama* on the grazing lands.

Now made absolute.

Rules laid down for melon lands.

Rights in *jand* trees.

The *jand* trees immediately round the pastoral hamlets are apportioned out to individuals, much in the same way as the melon lands. Generally the allotment is permanent in its character, but sometimes the trees round a hamlet are re-distributed every year. In the same way well owners preserve the trees for a certain distance round their wells for their own use, though these grow on *shamilat* and not on private lands. A general clause with regard to

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such trees has been entered in the administration paper, but no attempt has been made to attest rights in individual trees.

Village communities and tenures— Rules for sinking new wells.

I have mentioned before that the sinking of new wells leads to much dispute in the Thal, as the new wells must interfere more or less with the grazing of the old wells. Although, too, there is next to no surface drainage in the Thal, yet still there is a little here and there, and a new well sometimes interferes with this, and prevents it reaching the lands of the old recipient. No hard and fast rules can be laid down for cases of this sort. Each case has to be decided on the grounds of expediency. Mr. Moore, who was for long in charge of the sub-division, laid down a very good rule that no one was to sink a well without first asking permission from himself, and permission was never granted without due regard to the objections put forward by the neighbouring well owners.

Bhakkar tenures since the first Regular Settlement.

The system of tenure described in the above extracts underwent no substantial modifications during the period which elapsed between the first and second Regular Settlements, the latter of which, so far as the Bhakkar Tahsil is concerned, taking place between 1898 and 1903.

In the Kachchi tract, during this period, as well as subsequently, there has naturally been a tendency towards partition of *shamilat* areas.

In the Thal, on the other hand, the *shamilat* areas are very large and until 1903 the *barani* cultivation was for the most part of a catch-crop order. Accordingly, during the last Settlement, it was decided that patches of *barani* cultivation in the Thal *shamilat* lands, which were under regular cultivation at that time, should be recorded as the *adna milkiyat* of those cultivating them, but that thereafter no rights of *adna milkiyat* should be acquired by *barani* cultivation.

In addition to this, agreements under the Sind Sagar Doab Colonization Act I of 1902 were executed in respect of their common lands by all the villages in the Bhakkar Thal, with the exception of three, Sohajunj, Gorcha, and Mehar Imam Shah. The effect of this has been to prevent partition of common lands in the Thal, and also to bar any acquisition of *adna milkiyat* rights by breaking up new patches to cultivation. Nonetheless since 1903 there has been an enormous extension of *barani* cultivation in *shamilat* lands, especially in the northern Thal, due mainly to the proved suitability of the soil for gram cultivation, but not entirely confined to this crop. The status of those, who have broken up the *shamilat* in this way, is at present somewhat indeterminate, inasmnch as they are barred from the acquisition of proprietary rights in the land which they have taken up, while on the other hand, except possibly in those villages where

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Village communities and tenures—

Bhakkar tenures since the first Regular Settlement.

ala milkiyat rights exist, it is doubtful whether they can be said to be in the position of tenants or liable to ejectment.

The immense areas at their disposal and the absence of defined limits of cultivation add to this indefiniteness, for it is not an uncommon custom to take up a new patch for cultivation every year, at the same time abandoning the old. This increase in the cultivated area is very strongly deprecated by those who represent the grazier population, but it seems doubtful whether their opposition to the economic force, which is at work to extend the cultivation, can avail to check it in any appreciable degree.

Land Revenue under Native rule.

Very little is known of the exact system or pitch of assessment in the Mianwali-Isa Khel Tahsils in times preceding the annexation, except that the land revenue demand consisted generally of $\frac{1}{4}$th (although a good deal less was taken) of the gross produce commuted into cash, together with small cesses such as *nazarana* (Rs. 2 to Rs. 5 per plough) and *kamiana* (a house tax on all non-agriculturists). The outturn was generally estimated by appraisement. Equally little is known of the systems of assessment in the old days in the southern tahsil except certain facts connected with the administration of Diwan Sawan Mal. During the Saddozai rule, which preceded that of the Sikhs, a cash assessment was apparently levied in the Thal according to the capacity of each well, while in the riverain tract the ancient rule seems to have been to take 8 annas per *path* (25 to 30 maunds) of produce which was increased by Nawab Muhammad Khan Saddozai to $\frac{1}{8}$th *batai* and subsequently to $\frac{1}{6}$th or even more. The wells paid a fixed *jama* of Rs. 5 to Rs. 10 each. Under the Sikh rule this tract was included in the Province of Multan, of which Diwan Sawan Mal was the famous Governor. He charged a cash assessment in the Thal on the basis that an ordinary well should pay Rs. 5 at *kharif* and Rs. 7 at *rabi*. The system was called "*Sat, Panj, Baran.*" In good seasons, fees such as *nazar mukaddam* or *shukarana* were imposed. The cattle paid a tax called "*tirni rasan*" and camels paid "*tirni shutran.*" On the riverain lands, the produce was weighed, and the Government share was given back to the cultivator at a price fixed by himself. *Zabtiana* and other cesses were levied where necessary, in order to make the demand a full one. Tobacco, cotton, and sugar were assessed at *zabti* (cash) rates. On the whole, Diwan Sawan Mal's assessment, though still remembered by people as mild and acceptable, could not have been a light one. An intimate knowledge of local conditions and the extreme elasticity of the demand obviously accounted for the popularity of the system notwithstanding the fullness of the assessment.

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Settlement and Surveys under British rule—The Summary Settlements.

From annexation until 1853-54 the revenue was collected in the Isa Khel Tahsil by appraisement of the produce, while in Mianwali, Mr. Bowring, Extra Assistant Resident, introduced cash assessments in 1848, fixing the demand at over a lakh of rupees. Captain Hollings made the first Summary Settlement of Bhakkar Tahsil in 1850 basing the assessment on average collections of the past three years. The assessment fixed by him was—

	Rs.
Land revenue	70,609
Tirni	25,336
Total ...	95,945

Major Nicolson made the first Summary Settlement of the Isa Khel Tahsil in 1853-54, while Mr. D. Simson, Deputy Commissioner of Leiah, effected the first Summary Settlement of the Mianwali Tahsil, west of the Salt Range, and second Summary Settlement of the Bhakkar Tahsil from 1853 to 1855. The second Summary Settlement of Isa Khel was made in 1857-58 by Major Coxe and the Mianwali Tahsil, west of the Salt Range, was resettled a second time by Captains Parsons and Smyly in 1860-61, the portion of the tahsil east of the Salt Range being resettled by Mr. Cowan, Extra Assistant Commissioner, in 1863-64. The third Summary Settlement of the Bhakkar Tahsil was conducted by Captain Mackenzie in 1862. The demand fixed at each of the Summary Settlements is shown below by tahsils :—

1st Summary Settlement.			2nd Summary Settlement.			3rd Summary Settlement.
Isa Khel.	Mianwali.	Bhakkar.	Isa Khel.	Mianwali.	Bhakkar.	Bhakkar.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
35,915	1,26,641	95,945	37,761	1,37,148	1,12,139	95,117

The second and third Summary Settlements of the Bhakkar Tahsil were contemporaneous with the first and second Summary Settlements of the two northern tahsils respectively. The figures will show that the revenue of the northern tahsils improved from the first to the second Settlement, but that the assessment of the

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Bhakkar Tahsil, which was unduly raised at the second Summary Settlement, had to be reduced even lower than the *jama* of the first Settlement.

The Summary Settlements—

The total revenue of the whole district, as now constituted, amounted to Rs. 2,70,026 before the first Regular Settlement.

Revenue systems.

The following extracts from the old Gazetteers describe the revenue systems at the Summary settlements with greater detail :—

... ...

The first and second Summary Settlements in Isa Khel.

"For the first four years of our rule the revenue was collected in the old crop appraisement way of the preceding Government, one-fourth the revenue commuted into cash being the standard of demand. In 1853-54 Major Nicholson made the first Summary Settlement, and framed his estimates on the average collections of the previous four years. The Settlement was for three years, but ran on for five, and was decidedly heavy. In 1857-58 a second Summary Settlement was made by Major Coxe, the then Deputy Commissioner, for five years, but continued to run until the end of 1875-76. The estimate was again one-fourth the supposed average gross produce of the land, but in fact a good deal less was taken. On the whole it was a full and fair assessment, generally not too heavy, but somewhat unequal in its incidence,—too light in some villages, too heavy in others, especially in some of the Mohar Khatak villages. At the first Settlement the total demand on estates now in this tahsil was Rs. 35,915, and at the second Rs. 37,761, being an increase of 5 per cent. In both Settlements the persons settled with were mostly the actual cultivators of the soil, whether proprietors or tenants.

Earliest assessments of Mianwali Tahsil. Component parts of the tahsil.

It is impossible to say what the revenue of Mianwali was in Sikh times; but, judging from the 1848 assessments of Mr. Bowring, Extra Assistant Resident, it must have been upwards of a lakh. According to the agreement deeds taken by that officer in 1848 and 1850-51, the annual demand was Rs. 1,29,350. The sum looks almost incredibly large, but in those days there was no separate grazing tax, and there were no extra cesses; nor are there any records to show how much of the original demand was each year realized. Besides this, the *jama* was for many villages very severe; so much so that in them many abandoned their lands and absconded. On annexation all the area now comprised in this tahsil to the west of the Salt Range was included within Leiah District, and remained so until that district was broken up on 1st January 1861, when Mianwali became a tahsil of the newly formed Bannu District. The tract east of the Salt Range, known as the Pakhar or Awankari country, was not transferred to Mianwali until 1st May 1862. It had originally been tacked on to the Jhelum, and then in 1857 to the Shahpur District. Owing to the position of the head-quarters of the different districts surrounding this tract, its allocation has always been difficult. Various other small changes have taken place since 1861. In the Thal, Harnoli and Wichwin were received from Bhakkar in the Dera Ismail Khan District in 1862, and several river villages have been transferred to or from Isa Khel at different times. The last change of this sort occurred in 1874, when eight villages were transferred to Isa Khel. The following paragraphs are written as if the limits of the tahsil were then what they are now.

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The Summary Settlements.—Working of the first and second Summary Settlements in Mianwali Tahsil.

The lump sum assessments of 1848 and 1850-51 ran until 1853-54 when a first Summary Settlement was made by Mr. D. Simson, Deputy Commissioner of Leiah, for all the country west and south of the Salt Range. The Pakhar tract east of the range was summarily settled at the same time by the Jhelum Deputy Commissioner. The joint result gave an area of 94,091 acres as under cultivation, on which the *jama* imposed was Rs. 1,26,641. The measurements were rough, but pretty accurate. A regular *khewat* was prepared. No maps were made. Mr. Simson's work was especially good and reliable, and his assessments were generally fair and full, and only in some few villages severe. In 1860-61 the country south-west of the Salt Range was again summarily settled by Captains Parsons and Smyly. The records then prepared, though, if we exclude the field map and index, as elaborate as those of a Regular Settlement in those days, were less trustworthy than their unpretending predecessors. In 1863-64 the Pakhar tract similarly came under Summary re-settlement, the assessing officer being Mr. Cowan, Extra Assistant Commissioner. The result of the above two second Summary Settlements was to show an area of 119,683 acres as under cultivation on which the *jama* imposed was Rs. 1,37,148. Up to between 1862 and 1864 the alluvial lands in the river villages were assessed as elsewhere; but between those years the fluctuating system, as now obtaining on the Indus in this district, was regularly introduced, and has since been worked with gain to the State and satisfaction to the people. Since annexation the land revenue has generally been paid punctually, and with no greater coercion than that of squatting a peon or two on a dilatory village or putting some of the lambardars in the lock-up.

The Bhakkar Tahsil. Captain Hollings' Settlement, 1850 A. D.

Captain Hollings made the first Summary Settlement of the Bhakkar Tahsil in 1850. It was very rough. No measurements were made, and the assessments were based on the average receipts for the three previous years (1847-49). Captain Hollings furnished an amusing little report, consisting for the most part of prefatory remarks. Among other matters mentioned, Captain Hollings explains, that the Government revenue had till then been collected in *mehrabi* rupees, but that as this entailed a loss to Government of Rs. 4 or 5 per cent. in the shape of exchange, he had rectified matters by assessing in Company's rupees. He had in this way raised the revenue to a sum equal to, if not more than, what it was before. Captain Hollings assessed as follows :—

	Rs.
Land revenue	70,609
Trinni	25,336
Total ...	95,945

This settlement was for three years.

Mr. Simson's Settlement, 1853-54 A. D. His classification of villages.

The second Summary Settlement was made by Mr. Simson in 1853-54. It was based on a careful measurement of the cultivated lands. Mr. Simson divided the villages of the tahsil into three classes; two of these consisted of Nasheb and Thal-Nasheb villages, the third entirely of Thal villages. The quality of the Kachi lands seems to have changed a good deal since then, and most of the Nasheb villages, which Mr. Simson graded in his second class, are

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superior now to those that he placed in the first class. Mr. Simson's assessment was as follows :—

	Rs.
Land revenue	87,521
Trinni	24,618
Total ...	1,12,139

This gives an increase of 16 per cent. on Captain Hollings' assessment. Mr. Simson justified the increase on the ground that the *parganah* was notoriously the most lightly assessed in the district, and that the rates were lower than those that had given a reduction in Leiah. The *jamas* assessed were not interfered with till Captain Mackenzie's Settlement, except in some of the river villages, where reductions had been necessitated owing to diluvion. The assessment was considered by Captain Mackenzie to have been a little too high. He writes, 'the villages of this tahsil had not been so clamorous for relief during the two or three preceding years as in Leiah, although internal irregularities with their attendant results obtained almost as much as in that *parganah*. The statistics warranted reduction. The *malguzari* area had decreased 4½ per cent. There was a falling off in the Nasheb cultivation of 9 per cent.' Captain Mackenzie accordingly reduced the land revenue 15 per cent. The *jama* assessed by Captain Mackenzie including *trinni* was as follows :—

	Rs.
Land revenue	71,556
Trinni	23,006
Total ...	94,562

Captain Mackenzie's Settlement, 1862 A. D.

The decrease on the whole revenue was Rs. 17,577, or 15 per cent. This decrease was not uniform. In many villages the former *jama* was enhanced. Captain Mackenzie's Settlement was reported in 1862, and was sanctioned for 10 years. The changes in the land revenue, subsequent to Captain Mackenzie's Settlement, have been almost entirely on account of alluvion and diluvion. That settlement was followed by a great increase of cultivation, by which the incidence of the demand was much lightened, and the revenue, except in parts of the Thal, has in consequence been collected all along without difficulty. The Thal *trinni*, owing to want of occasional revision gave a good deal of trouble during the last years of the Settlement, and two or three large villages eventually broke down."

The first Regular Settlement.

The first Regular Settlement was effected from 1872 to 1878 by Mr. Thorburn in the two northern tahsils, which formed part of the old Bannu District, and by Mr. Tucker in the Bhakkar Tahsil, which was included in the old Dera Ismail Khan District. The tahsils were divided into assessment circles and rates were proposed by soils. The assessment (including the *tirni* or grazing *jama*) of the tract above the high bank of the river was fixed, but the riverain lands were placed under a fluctuating system of assessment. The *sailab* area was to be assessed from year to year throughout the Mianwali and Isa Khel riverain at

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the following rates per acre of cultivation, *i.e.*, the area sown with either the autumn or the spring crops :—

	Rs.	A.	P.
On *nau baramad, nau abad-ta-do-sal, banjar nautor-ta-do-sal* and true *kalri* lands ...	0	12	0
On all other cultivation	1	4	0

The well-irrigated lands were not assessed to any additional rate. A grazing assessment was to be imposed on the waste lands in the riverain tract from year to year at an uniform rate of Rs. 3-2-0 per 100 acres, provided that the waste lands of a village equalled or exceeded the area under cultivation in that village. *Kanah* (*saccharum munja*), *kundar* (the bulrush) and *kanh* (*saccharum spontaneum*) whenever preserved were to be assessed at full cultivation rates. The system introduced in the Bhakkar Tahsil was slightly different. Instead of an uniform *sailab* rate for the whole tract, a rate was fixed for each village, the average for the tahsil being—

	Re.	A.	P.
Pakka	0	14	0
Kacha and Bet	0	11	0

per acre of cultivation. The wells were assessed to a lump sum called *abiana* (which was fixed) similarly to the Muzaffargarh District. Lands irrigated by *jhalars* paid a higher assessment than *sailab*, at rates fixed for each village. The grazing assessment was imposed from year to year on the waste area at Rs. 3-8-0 per 100 acres. Date trees in the Bhakkar Tahsil were assessed to a fixed revenue of Rs. 682.

The change introduced in the system of assessment of the riverain tract was most beneficial. The total assessments announced by Messrs. Thorburn and Tucker for each tahsil are noted below :—

TAHSIL.	LAND REVENUE.		GRAZING REVENUE.		Fixed date revenue.	TOTAL.
	Fixed.	Fluctuating.	Fixed.	Fluctuating.		
Isa Khel	37,168	18,030	...	1,149	...	56,347
Mianwali	64,955	48,788	3,675	896	...	1,18,314
Bhakkar	17,972	73,743	14,092	3,993	682	1,10,482
Total ...	1,20,095	1,40,561	17,767	6,038	682	2,85,143

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Second Regular Settlement, 1898—1908.

The following extracts from the final report on the Second Regular Settlement by Rai Bahadur Pandit Hari Kishan Kaul, C.I.E., describe in detail the various matters connected with the system of Settlement and Survey, the results of the Settlement, and other important connected facts :—

Revision of the records.

" A special revision of records of rights was authorized by Punjab Government notification No. 158, dated 6th October 1898, in the Bhakkar Tahsil, then forming part of the Dera Ismail Khan District, and by Punjab Government notification No. 2191 S., dated 28th September 1903, in the Mianwali and Isa Khel tahsils. The whole district has been re-measured on the square system with the following exceptions :—

" (1) The maps of the hilly tract of Bhangi Khel where cultivation had not varied much since last Settlement have been amended. The measurements of the last Settlement were found fairly correct where cultivation was concerned.

" (2) Similarly maps of four Khudri villages lying east of the river, where square laying was impossible owing to the rough nature of the ground, and cultivation was confined to level pieces of land along the beds of ravines or to flat bits lying on top of or between hillocks, were only amended. The maps were, however, not so very accurate here, and considering all the trouble which had to be taken on the *tarmim* (correction of maps), it would perhaps have been just as well to have measured the villages anew by plane-table.

" (3) The hills stretching across the Mianwali Tahsil and those encircling the Isa Khel Tahsil on the north, west and south were measured by plane-table, the triangles being linked on to the square systems so as to obtain continuous maps of entire villages.

" (4) Unlike the Mianwali Thal which has plenty of *barani* cultivation and has been completely re-measured, the Bhakkar Thal was, when the Settlement of the southern tahsil was commenced in 1902 under the late Captain Crosthwaite, considered to be too dreary and extensive a tract to require re-measurement. A revenue survey of the tract had been made in 1873 to 1879, and the wells which then existed were plotted on the survey maps. Cultivation in this tract depending mainly on well irrigation, what was needed primarily was to fix the position of the patches of well cultivation lying miles apart from one another. It was decided to make use of the survey maps. The wells with the areas attached to them were measured separately on maps of 40 *karams*=1″ scale : a tracing of survey map (scale 4″=1 mile, or 240 *karams*=1″) was taken for each village and a reduction of the map of each well was fitted into its proper place with reference to the positions of wells indicated on the survey map. New wells were fixed with reference to the positions of the neighbouring wells. Besides the well cultivation there was a certain amount of *barani* land, sown with light crops purely on local rainfall. These patches were also measured up, each independently of the other, and maps containing numbers of these isolated fields were prepared on the scale of 40 *karams*=1″. The positions of these fields were fixed on the collective village map (scale 240 *karams* =1″) between the wells by means of plane-table. The measurements were completed in 1898-99. As, however, the very lenient system of assessment of *barani* cultivation, which was introduced in *kharif* 1903, gave a great impetus to the extension of that class of

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Second Regular Settlement, 1898—1908.

Revision of the records.

cultivation, crop inspection became impossible in a short time, and in the winter of 1906 it was found that it was neither possible for the *patwari* to follow the small scale village map on the ground nor practicable to bring the extended cultivation on to the map and thus keep it up to date. Besides, the people had, during the interval, discovered some gross errors in the position of *barani* fields, and these cases began to give trouble both to Civil Courts and to Revenue Officers, neither of them knowing how to settle them. With the permission of Government, conveyed in Senior Secretary to the Financial Commissioner's endorsement No. 469 S., dated 10th October 1907, a re-measurement of the northern part of the Thal containing most of the *barani* cultivation was undertaken in October 1907. Twenty villages (with a total area of 339,749 acres) have been completely re-measured on the square system, the field maps being prepared on the scale of 80 *karams*=1″. The maps of 23 villages have been enlarged by scale from 240 *karams*=1″ to 80 *karams*=1″. Of these, maps of 6 villages (covering a total area of 258,321 acres) have been amended and brought up to date as regards the growing *barani* cultivation. With these enlarged maps, it is possible to do the crop inspections properly. Complete re-measurement was avoided where possible and in cases where the 240 *karams*=1″ maps were fairly accurate with regard to the position of the fields, it was deemed sufficient to enlarge the map and show the additional *barani* cultivation on it in the same way as is done at a quadrennial attestation. In remeasuring the Thal villages the *khatauni* was not touched, all attestations made under the late Captain Crosthwaite being presumed as correct. The field book was also not amended except when it was absolutely necessary to do so. The fields previously measured were reproduced on the new maps in exactly the same dimensions, all additional cultivation being shown in red and marked with separate field numbers on the system of quadrennial attestation. The most difficult part of the work was that of fixing in their proper places the *barani* fields which were plotted wrongly on the maps of 1898. This was done by Settlement Naib-Tahsildars after personal inspection of each such field and all disputes were decided by me on the spot.

"The re-measurement of the riverain tract of the Mianwali and Isa Khel tahsils was attended with many difficulties. At last Settlement measurements appeared to have been confined to cultivated lands, the area under the river and the unculturable sand having been plotted on the field maps with reference to previous *thakbast* (village boundary) and other maps. During the past 30 years almost all the lands cultivated at last Settlement were eroded by the river and the old beds of the streams silted up. In short the aspect of the whole tract was changed. Boundaries of villages were laid down from time to time in accordance with the Settlement maps, directions of lines projecting towards the river and the positions of trijunctions being fixed mostly by guess work. The result was that village boundaries were established in wrong places and people took possession of land in places which differed very considerably from those indicated on the Settlement maps. Moreover when the whole distance from high bank to high bank was measured up on the square system, it was found that the Settlement maps could fit into the distance as little as the maps of individual fields and villages agreed with the limits of possession. Luckily, however, a condition was recorded in the administration paper of every village in the *kacha* to the effect that on land being thrown up by the river, possession must follow the Settlement map and that possession taken up by co-sharers would have to be

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11. Order of Collector determining the assessment.

12. Order of distribution of assessment (with list showing area and assessment of joint wells in the Thal).

13. Mutation sheets.

Second Regular Settlemet, 1898–1908. Maps.

" The field maps of the Mianwali and Isa Khel Tahsils prepared at last Settlement on the scals of 60 *karams*=1" were quite correct where cultivation was concerned, but numerous mistakes were discovered even in the uplands in areas which were not cultivated at last Settlement. In the riverain tract, large errors had crept into areas under the river bed. The maps of the other tahsil are said to have been more generally correct. The changes caused by the river in the riverain tract and the enormous extension of cultivation and the consequent partition of lands in the uplands of the two northern tahsils necessitated a remeasurement of almost the whole of the district as explained above. The new maps bave been prepared generally on English mapping sheets on the scale of 40 *karams*=1". The maps which have been amended are on the scale of 60 *karams*=1" and the village maps of the Bhakkar Thal are on the 240 *karams*=1" scale, except in villages which have been remeasured or of which the maps have been enlarged; the scale used there being 80 *karams*=1".

The genealogical tree.

" A complete genealogical tree of superior and inferior proprietors was prepared at last Settlement. This was attested at the time of remeasurement and brought up to date. The new genealogical tree prepared contains a record of four generations or more upwards beginning from the existing owners and containing at least one ancestor included in the last Settlement record (the names of such persons being in the Mianwali and Isa Khel Tahsils enclosed in a green square). The present document has thus been connected with the old genealogical tree without the unnecessary trouble of reproducing the old table. In the Mianwali and Isa Khel Tahsils a *shajra nasab* (genealogical tree) has also been prepared for the occupancy tenants with a view to assist the courts in deciding questions relating to inheritance of occupancy right.

The land *jamabandi.*

" The *jamabandi* forming part of the new Record of Rights is in all three tahsils a copy of the *khataunis* attested at the spot; and, instead of being the Record of Rights for any particular year throughout a tahsil, is what may be called the measurement (*paimaish*) *jamabandi*, representing the state of affairs at the time of final attestation of the *khatauni* of each village. A detailed *jamabandi* was prepared in the Bhakkar Tahsil in 1897-98 and in the Mianwali-Isa Khel Tahsils in 1902-03 just before the commencement of Settlement operations in each set of tahsils. The *khataunis* (holding slips) prepared at measurement were attested with reference to this *jamabandi*, the Settlement record and the genealogical tree brought up to date. When the *khatauni* had been completely attested by the Naib-Tahsildar and Tahsildar the *jamabandi* was prepared from it without any alteration in ownership or possession. All changes which had occurred by the time having been incorporated in the *khatauni*, no necessity was felt of preparing a later *jamabandi* for the sake of the few mutations which came subsequently to light. The *jamabandis* of the southern tahsil were completed by the end of 1902-03. Quadrennial attestations of the records began in this tahsil from 1904-05, detailed *jamabandis* of one-fourth the total number of villages being prepared every year.

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"In the northern tahsils, the size of some of the *mauzas* (villages) was enormous. In some cases there was no connection between different parts of a village, in others the village maps merely indicated administrative limits including lands belonging to residents of different villages and entered in the *jamabandis* of those villages, while in some the process of partition, the assertion of individual rights and the building of hamlets by individuals or groups of landowners had created independent blocks. In all such cases it was simply impossible for one *patwari* to carry on the work of one whole village and the appointment of more *patwaris* than one resulted in endless trouble to the *zamindars* and unavoidable inconvenience in the work of the *patwaris* themselves. Proposals were therefore made to split up these estates into 2, 3, 4, 5, 6 or 7 each and sanctioned by the Financial Commissioner's letters Nos. 5784, 2317 and 817, dated 28th September 1905, 30th August 1906 and 9th February 1906, respectively. Each part has now been made into a separate village. In some cases as many as 5 *patwaris* have now been appointed to the new villages formed out of one parent village. The unusually large size of original villages and the necessity for carefully comparing the papers of newly formed villages, with those of the parent village, however, greatly complicated the work of attestation and completion of the measurement file. Several very heavy partitions were also effected during the course of the Settlement, such as that of the village Wanbhachran with a total area of about a hundred thousand acres. The complicated tenures peculiar to these tahsils, which need not be described here, also made the work of attestation a very difficult one, and the *ala milkiyat* (superior proprietary rights) held on innumerable minute shares made it extremely tedious. The Taja Khels of Mochh (Mianwali) held superior proprietary rights in 19 of the Kacha villages, their shares being the same everywhere. The result was that the death of one of them necessitated mutation of names in 19 villages although his share of the *ala milkiyat* due was often worth only an anna or so. With the consent of all of them the *ala milkiyat* was partitioned, a certain number of the *ala maliks* being given the rights in each village to the exclusion of the others. This has greatly simplified matters. Not the least important of the changes effected in the *jamabandis* is the abolition in many of the villages of the system of grouping by *warhis* or families. The *warhi* is nothing like a *patti, i.e.,* it is not a group of owners possessing land within specified limits. But it means the members of one family descended from a common ancestor, much nearer than the ancestor after whom the clan or sub-clan is known. All land belonging to members of the family was said to belong to the *warhi*, and any one purchasing land from one of the members also became a member of the *warhi*. Free intermarriage and transfers between the *warhis* had resulted in one man appearing in half-a-dozen or a dozen *warhis*, and the communal tie of the *warhis* remained only as a mere form. The system of *warhis* resulted in names appearing time after time in the genealogical tree and one person's holding being split up into a dozen in the *jamabandi*. The people themselves preferred their holdings being brought together. The system of *warhis* was therefore abolished except in villages where there was common land belonging to *warhis*, and the system had to be maintained. In most of the villages, therefore, each family now appears only once in the genealogical tree, and all land belonging to one owner is brought together in one holding in the *jamabandi*.

The date *jamabandi*.

"In the Bhakkar Tahsil, where date trees are numerous and have been assessed to revenue, a date *jamabandi* has been prepared in addition to the land

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jamabandi. The date *jamabandi* which was prepared at last Settlement was not kept up to date, and consequently a careful attestation of the rights in the trees had to be made. Two enumerations of date trees were made, one in 1899 and the other in 1901, and the results of the second enumeration were put down in the *jamabandi,* which also gives the name of the owner of trees, the number of the field on which the trees stand and the revenue assessed thereon. The form used in the record of rights has been slightly altered for future use.

The *tirni jamabandi.*

"A *tirni jamabandi* was prepared in the Bhakkar Tahsil for every village, showing the owners of cattle, the number of cattle (with description) owned by each, and the grazing *jama* paid by each cattle-owner in the year in which the *jamabandi* was prepared. This record was needed in some of the Thal villages where according to the conditions of *wajib-ul-arz* the graziers are entitled to a share in the common waste land at the time of partition. It is unnecessary to prepare these *jamabandis* in future as the cattle enumeration lists, which are prepared from year to year, contain all the information and will, under instructions laid down in *dastur-ul-aml,* be preserved till partition of the common lands.

Riwaj-i-abpashi.

"A *riwaj-i-abpashi* or statements of rights in irrigation by other sources than wells was prepared at last Settlement for all hill torrents and for the Kurram Canals in the northern tahsils. This statement has been revised and brought up to date. A collective statement has been drawn up for each of 5 hill torrents and the Kurram Canal in the Isa Khel Tahsil and a similar record prepared for the source or sources of irrigation of each village in both tahsils.

The *wajib-ul-arz.*

"The new *wajib-ul-arz,* or village administration paper as it is called, is a statement of customs prevailing in a village in regard to matters detailed in Land Revenue Rule 203. In preparing the new administration paper, the old *wajib-ul-arz* has been copied, omitting portions which related to subjects expressly provided for by law and making necessary alterations in order to bring the statement into accord with actual usage.

"The *wajib-ul-arz* bound up with the Record of Rights of the Bhakkar Tahsil was found in several cases to be incomplete or to contain matter which had neither been copied from the old *wajib-ul-arz* nor inserted after proper attestation. Indeed there was no record of a proper attestation of the *wajib-ul-arz* having been made. A revision of the new *wajib-ul-arz* was therefore sanctioned in Financial Commissioner's endorsement No. 469 S., dated 10th October 1907, and the administration paper of all the villages in the two tahsils has been re-attested and re-written, the document bound up with the Record of Rights being taken out and destroyed and replaced by the properly attested one.

"In respect of common lands in the Bhakkar Thal, the restrictions created by the execution of agreements under the Sindh Sagar Doab colonization Act I of 1902, have been incorporated in each case in the *wajib-ul-arz* of the village concerned.

"The customs relating to irrigation are important in this district owing to the system of *Ghandis* (dams) and water channels, by which the river water in the riverain tract and the hill torrent and Kurram Canal water in the uplands of Mianwali and Isa Khel is laid on to cultivated lands. In several cases there was a recorded custom for the supply of free labour for constructing

and maintaining *ghandis* (dams) and other works. Conditions to this effect have now been recorded in the *wajib-ul-arz* of every village in the riverain tract and in every village above the high bank which receives hill torrent or canal water. The rights of Government in gold-washings from the river, in saltpetre, petroleum, etc., have been duly recorded in villages where such articles are produced.

Second Regular Settlement, 1898—1908. The new assessment.

"A general re-assessment of the Dera Ismail Khan District then including the Bhakkar Tahsil was authorized by Punjab Government notification No. 159, dated 6th October 1898, and a re-assessment of the Mianwali and Isa Khel Tahsils was undertaken under the authority of Punjab Government notification No. 2190, dated 28th September 1903. The instructions contained in Mr. Douie's Settlement Manual have been followed in carrying out the work of re-assessment and revision of records.

Assessment circles.

"The assessment circles into which each tahsil was divided for assessment purposes at this Settlement are named in the following table, and the circles which corresponded to them at last Settlement are also noted :—

Tahsil.	Assessment circle at this Settlement.		Corresponding assessment circles at last Settlement.
Mianwali	Pakka		Mohar, Kacha-Pakka, Thal Kacha.
	Kacha		Kacha-pakka, Thal Kacha.
	Khudri		Pakhar.
Isa Khel	Bhangi Khel		Bhangi Khel.
	Pakka		Mohar, Danda, Pakka-Kacha.
	Kacha		Kacha, Pakka-Kacha.
	Nahri		Nahri.
Bhakkar	Thal ...	Kalan ...	Thal.
		Daggar ...	Daggar, Pakka.
	Indus Valley ...	Pakka ...	Pakka.
		Kacha ...	Kacha, Bet.

"In the Mianwali-Isa Khel Tahsils, the Khudri (Pakhar) and Bhangi Khel Circles have remained intact. The latter circle depends entirely upon local rainfall and hill drainage, a little land in one place being irrigated by a perennial hill stream. The former has besides similar resources a few wells clustered round village sites and benefits from surface drainage of rough country in the Talagang Tahsil of the Attock District. The limits of the Nahri Circle of Isa Khel irrigated from Kurram Canals have only been slightly altered.

"Leaving the above circles out, the whole of the tract above either high bank of the river has been called the Pakka Circle, while the whole area lying within the high banks has being included in the Kacha Circle. A few of the Kacha villages which extended well above the high bank have been excluded from the Pakka Circle although the upland portions thereof have been assessed

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similarly to the Pakka. The Pakka Circles are dependent on rain assisted by hill torrents bringing down rain water from the adjoining hills. Wells are rare and are built primarily to supply drinking water except in a strip of land adjoining the river near Kalabagh or in the southern portion of the Mianwali Pakka. The excessive depth of spring level makes the construction and working of wells a practical impossibility. The Kacha Circles thrive on river floods. Wells are constructed on lands considered safe for the time from erosion, but their number is small. The Bhakkar Tahsil was dealt with by tracts, the whole area above the high bank being called the Thal tract, and that below it, the Indus valley. The former was divided into two parts: (1) The Thal Kalan Circle comprising the eastern and main portion of the sandy Thal; and (2) the Daggar, being the western portion of the Thal which adjoined the high bank of the river. The latter tract was divided into (1) the Pakka or the securer portion adjoining the high bank and (2) the Kacha or the more insecure part which is more exposed to the action of the river.

"In the Thal cultivation is mainly *chahi* except in the northern half where there are plenty of *barani* lands. The Daggar portion is more wooded and wells lie closer together there than in the Thal Kalan. The Indus Valley is similar to the Kacha of Mianwali and Isa Khel with this difference that the Pakka portion has a much larger number of wells and depends more on artificial flooding by means of embankments, etc.

Systems of assessment.

"After full consideration of the conditions of the various parts of the district, the whole district has been given a fluctuating assessment with the exception of the hilly tracts of Khudri and Bhangi Khel, a few other villages in the Isa Khel Tahsil and the Powah of the town of Bhakkar. The following four systems have been adopted for the assessment of cultivated lands:—

(1) Fixed assessment, (2) Fluctuating assessment by crop rates, (3) Fluctuating assessment by all round rates, and (4) the Thal system of fluctuating assessment.

Fixed assessment.

"Of the tracts previously under fixed assessment the system has been maintained in (1) the whole of the Khudri Circle of Tahsil Mianwali, (2) the whole of the Bhangi Khel Circle, (3) the village of Kalabagh in the Pakka Circle, and (4) the villages of Sarkia, Kas Umar Khan Pakka, Masit, Bhut and Gidranwala in the Nahri Circle of the Isa Khel Tahsil, (5) the Powah of the town of Bhakkar. In all these cases the *jama* has been fixed for the term of Settlement, and rules have been drawn up regulating reductions, suspensions and remissions of revenue (Parts A, B, and C respectively of Appendix VII of the Final Settlement report). The total land revenue demand fixed in the above manner amounts to Rs. 39,306 in the whole district. A sum of Rs. 3,222 fixed on the *barani* cultivation of the Bhakkar Thal and the villages of Tibba Mehrban Shah and Tibba Gaman Shah since transferred to the Mianwali Tahsil has under the orders of Government been thrown into the grazing *jama* of that circle as will be explained further on and has been treated as part of the grazing assessment.

Fluctuating assessment by crop rates.

"The old system of fluctuating assessment prevailing in riverain tracts has been modified. The area of matured crops (excluding *kharaba*) will now be assessed every harvest to a rate fixed for each crop throughout an assess-

ment circle or in a group of villages. The crops have been classed as follows with reference to their productiveness :—

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Class I.—Sugarcane, chillies, fruits, vegetables, including spices, tobacco and wheat.

Class II.—All crops not included, in classes I and III.

Class III.—*Jowar*, *massar*, peas, water-melons (in Mianwali and Isa Khel Tahsils) and fodder including carrots, turnips, *china*, *samukha*, etc. (water-melons have been placed in class II in the Bhakkar Tahsil).

"Rates have been fixed by classes and vary from Re. 1-10-0 to Re. 1-2-0 per acre on the 1st class crops. The rate on class II crops is Re. 0-14-0 per acre throughout the southern tahsil and Re. 0-14-0 or one rupee per acre in the Mianwali and Isa Khel Tahsils, while class III crops have to pay uniform rates of 6 annas and 8 annas per acre in all the riverain villages of the southern and northern tahsils, respectively.

"The *sailab* crops assisted by well or *jhallar* irrigation have not been assessed to any additional rate in the northern tahsil except in the case of a few wells lying in two villages and adjoining the town of Mianwali. In the southern tahsil the richer wells have been assessed to an additional rate varying from 2 to 8 annas per acre of matured first class crops. The 2nd and 3rd class crops on these wells and all the crops on the other wells will be exempt from additional assessment. The rates fixed for a village and the additional rate fixed for a well cannot be raised during the currency of the Settlement, but the Collector may lower them with the sanction of the Commissioner if he finds that the land or well has permanently deteriorated owing to the action of the river. This system will apply to (1) the whole of the riverain portion of the Kacha Circles of the Mianwali and Isa Khel Tahsils, the riverain portions of the villages of Daud Khel Pakka and Mochh Pakka in the Pakka Circle of the Mianwali Tahsil and the riverain portion of one village Khuddozai in the Pakka Circle of the Isa Khel Tahsil and (2) the whole of the Indus Valley in the Bhakkar Tahsil.

Fluctuating assessment by all round rates.

"The uplands of the Mianwali and Isa Khel Tahsils though suited to a fluctuating assessment did not require the complication of crop rates, as they are not subject to wholesale variations in the productive capacity of lands like the riverain tract. An all round rate per acre of matured crops of whatever class or kind has therefore been fixed for every village with reference to its paying capacity, (1) for all *barani* lands and (2) for all *nahri* lands (where there is *nahri* cultivation). The rate will be applied to the area under matured crops in each harvest. An additional rate which has also been fixed for every village will be charged on all *barani* land which is flooded from hill torrents (*naledar*) or on land irrigated from permanent hill streams (*abi*) during the harvest and crops irrigated from wells will pay the all round *barani* rate together with the additional rate fixed in each village for well cultivation. Watermelons raised on sandhills and waste lands are not to be treated as a crop.

"The all round rates fixed vary from Re. 1-2-0 to Re. 0-8-0 per acre and the additional rates on *chahi*, *abi* and *naledar* crops from 2 to 10 annas per acre.

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"The system of assessment has been introduced in (1) the whole of the Pakka Circles with the exception of Kalabagh (Isa Khel), (2) the upland portions of the Kacha Circles, (3) villages Isa Khel, Sheikh Mahmud, Choranwala, Vial Sheikh Bahadur, Sarwar Khel, Khagglanwala and Dhullianwala, of the Nahri Circle and (4) parts of such villages of the Isa Khel Kacha, to which canal irrigation has been extended, *viz.*, Kacha Nur Zaman Shah, Kazi Wala, Kalu Khel, Gajranwala, Attak Paniala Kacha, Kundal Kacha, Kas Umar Khan Kacha and Ban Mahi.

"The total assessment of the tract placed under this system is estimated at Rs. 1,23,603 per annum. If any of the lands placed under the system of assessment are eroded by the river, they will on being thrown up by the river and brought under cultivation be assessed at the crop rates fixed for the adjoining Kacha village. If hill torrent water is laid on to lands in villages for which no additional rate has been fixed, an additional assessment at the average rate of 4 annas per acre of matured crops (sanctioned for the tract) will be charged. Similarly if a new well is constructed in a village for which no *chahi* rate has been fixed, the exemption from revenue will be calculated at the average additional rate of 4 annas per acre sanctioned for the Pakka Circles.

The Thal system of assessment.

"The Thal system of assessment introduced at the recent settlement of the Muzaffargarh District has been adopted in the whole of the Thal tract of the Bhakkar Tahsil and in the Thal portion of two villages named Tibba Gaman Shah and Tibba Meharban Shah originally assessed with the Bhakkar Thal but now included in the Mianwali Kacha. This system is a compromise between the fixed and fluctuating systems of assessment and is peculiarly suited to the conditions of the tract and the intelligence of the inhabitants. Owing to the capricious nature of the rainfall on which so much depends in the Thal, the tract cannot stand a fixed assessment. On the contrary the people are too ignorant to understand an annual field-to-field assessment and too poor and thriftless to bear the worry of an ordinary fluctuating assessment. The course adopted is this. The *jama* of every undivided well and of every holding in a divided well, whether under cultivation or not, has been fixed, and the owner thereof informed that he will have to pay the fixed assessment whenever he sows half an acre or more of land in a holding or an acre or more in an undivided well, in one year, except of course when the assessment remains in abeyance under a certificate of exemption. The land attached to joint wells is held in clearly defined shares, *i.e.*, in fourths or thirds or halves. In respect of joint wells, therefore, only that much of the assessment will be recoverable in a year, which corresponds to the share under cultivation. The crops sown on a well are invariably helped to maturity, and so no regard will be paid to failure of *chahi* crops, thus eliminating one source of worry in fluctuating assessments. Detailed rules for the working of the system are given in Part E of Appendix VII of the final Settlement Report."

Estimate of total fluctuating assessment.

[The total fluctuating assessment by the three systems above mentioned, namely, fluctuation by crop rates, fluctuation by all round rates and the Thal system, was estimated at Settlement to result in a demand amounting for the whole of the three tahsils to Rs. 3,38,840.]

Revenue on date trees.

"There are no date trees in the Mianwali and Isa Khel Tahsils. In the southern tahsil they are found in considerable numbers round the wells in the

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Indus Valley adjoining the high bank, and some trees are also found on wells just above the high bank and included in the Thal. The dates have been assessed at rates varying from 9 pies to 1 anna per female tree. No date *jama* is assessed on villages, where the female trees are so few, that a *jama* of Rs. 10 is not given.

Second Regular Settlement, 1898—1908. Revenue on grazing lands.

"With the exception of the Bhangi Khel and the Isa Khel uplands, a grazing assessment was imposed at last Settlement on village grazing lands in the whole district. In the riverain tract, the waste area was assessed annually at Rs. 3-2-0 per hundred acres in the northern tahsils and at Rs. 3-8-0 per hundred acres in the southern tahsil. In the northern tahsils, however, waste lands on which *kundar* and *kanah* grasses were preserved were assessed at the full cultivation rate of Re. 1-4-0 per acre. The grazing assessment of the other tracts was fixed. In the Mianwali Tahsil the grazing *jama* of the Khudri Circle, which has the advantage of hill grazing, has been raised from Rs. 460 to Rs. 600, and has been fixed again for term of Settlement. The grazing *jama* of Rs. 2,975 assessed at last Settlement on the Pakka Circle of Mianwali has been remitted altogether. In the Isa Khel Tahsil no grazing *jama* has been assessed except in the Kacha, although considerable hill areas excluded from measurement at the last Settlement have been included in the submontane villages. The grazing *jama* of the Mianwali-Isa Khel Kacha (with the exception of the Sadat Miani villages transferred from Bhakkar which are treated similarly to that tahsil) has been fixed at rates varying from Rs. 2-8-0 to Rs. 4 per hundred acres of waste, no revenue being taken from villages when the grazing land cannot in any year give Rs. 20 at the rate fixed for them. The *jama* will be subject to modification owing to alluvial action in accordance with rules given in Part F of Appendix VII of the Final Settlement Report. The grazing *jama* of the tract thus fluctuates from year to year. In the Indus valley of the Bhakkar Tahsil, the rate of Rs. 3-8-0 per hundred acres of waste has been maintained for the assessment of the grazing *jama* every year. In the Thal tract the grazing *jama* assessed at last Settlement was reduced, but a further sum, which had been assessed on *barani* lands in the Thal, was lumped together with the grazing assessment, and the total amount thus arrived at was made recoverable from the *barani* lands as well as the cattle. The *barani* lands are to be assessed to 4 annas per acre of crops every harvest, and the amount so recovered is to be credited towards the grazing assessment in each village, the balance being recovered from the cattle. The owners of all villages where there is *barani* cultivation have agreed to combine the two *jamas* with reference to paragraph 5 of Punjab Government Review of the Thal Assessment Report, No. 136 S., dated 26th May 1903. The collective demand on account of grazing assessment is therefore to be treated as the maximum demand out of which the Collector can, subject to the control of the Commissioner, remit in a year of drought or murrain such portion of it as he thinks necessary in each village. The villages of Tibba Gaman Shah and Tibba Meharban Shah now included in the Mianwali Tahsil, were assessed similarly to the Thal and are under the same system of grazing assessment.

Revenue on water-mills.

"There are nine water-mills in the Mianwali and Isa Khel Tahsils which have been assessed to a fluctuating revenue of Rs. 5 each per annum to be paid whenever a water-mill is at work. Any water-mills started in future will also be assessed at the same rate.

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Total revenue from all sources.

"The total revenue from all sources as imposed at Settlement is given below:—

		Rs.	Rs.
Land Revenue	Fixed ...	39,306	3,78,146
	Fluctuating ...	3,38,840	
Revenue on dates (fixed) ...			971
Revenue on grazing lands including *barani*.	Fixed ...	14,749	20,689
	Fluctuating ...	5,940	
Revenue on water mills (fluctuating) ...			45
Total	Fixed ...	55,026	3,99,851
	Fluctuating ...	3,44,825	

The following table shows the percentage of increase or decrease of the revenue imposed at this Settlement, as given above, when compared with that imposed at the previous Settlement in each of the three tahsils:—

——	1st Regular Settlement.	2nd Regular Settlement.	Increase or decrease per cent.
Isa Khel	56,347	75,525	+ 34·4
Mianwali	1,18,314	1,73,911	+ 47·0
Bhakkar	1,10,482	1,50,415	+ 36·1
Total ...	2,85,143	3,99,851	+ 40·2

The percentage of total increase thus exceeds 40 per cent."

[The annual realizations of land revenue under the present Settlement are given year by year in Tables 39 and 40 of Part B.]

Cesses.

"The cesses chargeable in addition to land revenue are—

	Per cent. Rs.	A.	P.
Local rate	8	9	6
Lambardari	5	0	0
Total	13	9	6

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"The local rate has been reduced for this district to Rs. 8-9-6 per cent. of land revenue by Punjab Government notification No. 87, dated 2nd April 1906. The *patwari* cess was abolished and the recovery of 2½ per cent. on the annual value (or 5 per cent. on land revenue) of lands as the village officer's (Lambardar's) cess authorized by Punjab Government notication No. 104 of the same date.

Second Regular Settlement, 1891—1908. Secure and Insecure areas.

"The areas placed under fixed assessment have, with reference to paragraph 552 of the Settlement Manual, been classified into Secure and Insecure. The villages of Massan, Nikki, Banni Afghanan and Pihai in the Khudri Circle of the Mianwali Tahsil, the Bhangi Khel Circle, village Kalabagh in the Pakka Circle, and villages Kas Umar Khan Pakka and Giddaranwala in the Nahri Circle of the Isa Khel Tahsil and the Powah of Bhakkar town have been classed as Secure. The remaining 11 proprietary villages of the Khudri Circle and the villages of Sarkia, Masit and Bhut in the Nahri Circle of Isa Khel have been treated as Insecure; so also has the grazing assessment of the Bhakkar Thal and of the two villages transferred from Bhakkar to the Mianwali Tahsil. The grazing assessment of the Thal villages is to be treated as the maximum demand, and remissions can be granted by the Collector out of it in bad years subject to the control of the Commissioner. For the Insecure villages under fixed assessment the following danger rates have been noted:—

Class of soil.	*Rate per acre of matured crops.* Rs. A. P.
Chahi, abi, naledar and *hail* ...	2 0 0
Other *barani*	1 8 0
Nahri	2 0 0 "

Term of Settlement.

The new assessments were introduced in the Bhakkar Tahsil with effect from *kharif* 1903, and the revised assessments were announced in the Mianwali and Isa Khel Tahsils from *kharif* 1907. The assessments were sanctioned for a period of twenty years, subject to a reconsideration, after the expiry of ten years, of the expediency of revising the grazing assessment in the Bhakkar Thal, having regard to the existing and anticipated increase in *rabi* cultivation.

Assigned revenue.

Most of the *jagirs* are held in perpetuity, the most important of them being those of the Malik of Kalabagh in the Mianwali and Isa Khel Tahsils, of Faizulla Khan and Karam Dad Khan in the Isa Khel Tahsil, of the Sadat Miani Sayyids in the Sadat villages of the Mianwali Tahsil, and of Nawab Hafiz Abdulla Khan, C. I. E., and Nawab Allah Dad Khan of Dera Ismail Khan, in the Bhakkar Tahsil.

There are some assignments peculiar to the district. *Tirni mafis* are enjoyed by the Khawanin and some other notables of the Isa Khel Tahsil in lieu of the privilege of grazing camels without payment of *tirni* to the camel *tirni* contractor. These allowances have been continued at the last (2nd Regular) Settlement, but at slightly reduced rates, as the grazing fees had also

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been reduced. In the Bhakkar Tahsil, petty *mafis* of *tirni*, amounting in some cases to two annas, are enjoyed for life and are being gradually resumed. Fifty-nine Thal roadside wells, nearly all of which are situated on the Bhakkar-Jhang road, are also in the enjoyment of assignments.

The following figures, which relate to the year 1912-13, comprise full details regarding the amounts and character of the land revenue assignments of the district.

Total land revenue assessed ...	... Rs. 4,19,313
Total area enjoying assignments ...	... Acres 1,07,127
Land revenue assigned—	
1. For maintenance of pubiic servants ...	Rs. 9,308
2. Other public or *quasi*-public purposes ...	" 847
3. For private benefit	" 20,470
Total land revenue assigned ...	" 30,625
Percentage of assigned revenue to total land revenue assessed	7·3

Distribution of Area and Revenue assigned is as follows :—

IN PERPETUITY.		FOR LIFE OR LIVES.		FOR TERM OF SETTLEMENT.	
Area.	Revenue.	Area.	Revenue.	Area.	Revenue.
Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
1,06,939	20,124	169	1,184	19	9,317

Size of proprietary holdings.

Table 38 of Part B gives details of the cultivating occupancy of land from year to year. The following remarks on proprietary holdings in the Mianwali and Isa Khel Tahsils are taken from the Assessment Report of those tahsils :—

" The size of proprietary holdings in Isa Khel and Mianwali Tahsils is roughly shown in the following table :—

Mianwali Tahsil.

——	Khudri circle.	Pakka circle.	Kacha circle.	Total Mianwali Tahsil.
Cultivated area (acres) ...	15	13	5	9
Total area (acres)	60	43	16	31

Size of proprietary holdings.

Isa Khel Tahsil.

	Bhangi Khel.	Pakka circle.	Nahri circle	Kacha circle.	Total Isa Khel Tahsil.
Cultivated area (acres) ...	4	11	7	7	8
Total area (acres) ...	53	50	15	22	35

"In the case of the Khudri, Pakka, and Bhangi Khel circles, the figures for total area are swollen by the inclusion of the large hill areas. In the Khudri circle the average of cultivated area is raised by the large holding of the Malik of Kalabagh. These figures include not only the land cultivated by the owners themselves, but that tilled by their tenants. The cultivated area of these tahsils, however, is mainly held by peasant proprietors, who plough their own lands. The holdings actually tilled by the owners themselves average 5 acres in Mianwali and 2½ acres in Isa Khel. Nearly every landlord handles the plough, and only the more fortunate amongst them resort to the luxury of letting out their lands to tenants, except in case of unavoidable absence on service, or of mortgages, or when some of the relations or adherents of their ancestors have acquired occupancy rights".

In the Indus valley portion of the Bhakkar Tahsil the average size of proprietary holdings at the time of its last Settlement (1899-1900) was 6 acres of cultivated land and 11 acres of total area. The holdings are very small and large holders are rare. It is not common to find a well held by one owner, unless he be a Hindu.

No useful figures can be given in regard to the Bhakkar Thal owing to the indiscriminate character of the cultivation.

Section D.—Miscellaneous Revenue.

There is no distillery in the district. There are seven shops for the sale of country liquor, and two shops,—one at Bhakkar and one at Mianwali—for the sale of imported liquors. Excise.

Table No. 41 of Part B shows the annual receipts under separate heads of excise, as well as the charges, and the incidence of the receipts on population.

The following statement shows the consumption in gallons of country liquor for the past five years:—

	Gallons.
1909-10	1,047
1910-11	1,470
1911-12	1,533
1912-13	1,371
1913-14	1,320

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Miscellaneous Revenue.

Excise.

There has been no marked increase. The district's population is mainly Muhammadan and is most abstemious. Except at fairs and other large gatherings, there is very little drinking by the ordinary *zamindar*, regular consumption of alcohol being confined more or less to some of the wealthier *zamindars* and to dwellers in the towns. Illicit distillation is unknown. In addition to the above-mentioned shops, there are refreshment rooms at Kundian and at Darya Khan Stations, for which special licenses for the sale of liquor have been granted.

The following is the strength of the Excise Establishment of the district :—

One Inspector.

One Muharrir.

Two peons.

Opium.

The district contains seven shops for the sale of opium. The cultivation of the poppy is prohibited in the district. Opium is imported from Afghanistan and elsewhere, but the popularity of excise opium is increasing and it is now most commonly used. Table No. 41 of Part B shows the annual receipts and consumption of opium, which does not fluctuate appreciably from year to year. No cases of opium smuggling have come to light.

Drugs.

The cultivation of hemp is prohibited in the district. *Charas* is imported from other districts and its consumption is small. The consumption of *bhang* is greater, and illicit cultivation of *bhang* is not altogether uncommon. The number of licensed vendors of drugs is six. Annual receipts and consumption are shown in table No. 41.

Income-tax.

The new income tax system was introduced in 1903-04, since when the number of assessees in each of the three classes has varied but little. In 1913-14 there were 326 assessees in the district and a total collection of Rs. 10,222. Of these, Bhakkar Tahsil had 150 assessees paying Rs. 4,095, Mianwali Tahsil 103 assessees paying Rs. 2,949, and Isa Khel Tahsil 68 assessees paying Rs, 3,067. No difficulty is experienced in the collection of the tax. The bulk of the tax is paid by the money-lending and grain-dealing classes, and in the Bhakkar Tahsil there are many traders in cattle, who deal with Amritsar and the Central Punjab, who contribute a considerable quota. Statistical details are given at length in tables 42 and 43 of Part B.

Section E.—Local and Municipal Government.

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The District Board.

The District Board holds its meetings at head-quarters, and the Deputy Commissioner is *ex-officio* chairman. The total number of members is 36, of whom 11 are officials, their membership being *ex-officio*; while the remaining 25 are non-officials, who are nominated to membership. There is a Secretary to the District Board and also a District Engineer, who are not members, but salaried servants of the board. The number of meetings held during the year 1913-14 was 7, the average attendance of all members being 61 per cent. The income of the board for the past three years and the incidence of taxation and of income is shown in the following table :—

Year.	Local rate receipts.	Government contributions.	Receipts from other sources.	Total receipts.	Incidence of taxation per head of population	Incidence of income per head of population.
	Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.
1911-12 ...	30,615	41,724	15,736	88,075	0 1 9	0 5 0
1912-13 ...	34,401	48,268	9,783	92,452	0 1 9	0 4 8
1913-14 ...	37,418	63,752	17,738	1,18,908	0 1 10	0 5 7

The opening balance for the year 1913-14 amounted to Rs. 27,562.

Details of the expenditure under several heads are given in table 45 of Part B. The total expenditure during the last three years has been :—

	Rs.
1911-12	81,674
1912-13	97,364
1913-14	1,03,432

During 1913-14 the expenditure on education amounted to Rs. 40,927 out of the above total, and it is upon this head that the greater portion of the board's expenditure is incurred. No important drainage or water-supply schemes have been carried out by the Board. The income of the board is comparatively small, and the board is largely dependent upon Government

CHAP. III-E.

Local and Municipal Government.

contributions. The metalled roads maintained by the Board are of no significance, except the road from Mianwali to Musa Khel which is still under construction.

Local Boards.

There are no Local Boards in the district.

Municipal Committees—

The district includes four Municipalities, all of which are constituted under the Municipal Act III of 1913. These are the Municipalities of Mianwali, Kalabagh, Bhakkar and Isa Khel.

(i) Mianwali Municipality.

The Mianwali municipality has been in existence since December 1903. It is composed of 15 members, of whom 5 are *ex-officio* and 10 are nominated. The Deputy Commissioner is *ex-officio* President. The number of meetings held during 1913-14 was 18, at which there was an average attendance of all members of 53 per cent. Figures of the annual income and expenditure are given in table No. 46. The main source of income is octroi. During 1913-14 Rs. 14,211, out of a total income of Rs. 23,248, was obtained from this source. During the same year the incidence of taxation per head of population was Rs. 2-4-6. A scheme for the supply of water to the town of Mianwali, as well as a scheme of drainage, is in contemplation by the Committee, but has not yet been consummated.

(ii) Kalabagh Municipality.

The Municipal Committee of Kalabagh is composed of 11 members, of whom 3 are appointed *ex-officio* and the remaining 8 are nominated. The Deputy Commissioner is *ex-officio* President. One of the members acts as Honorary Secretary of the Committee. During 1913-14, 17 meetings were held, at which the average attendance of all members was 62 per cent. The chief source of income is octroi which during 1913-14 provided Rs. 10,091 out of a total income of Rs. 13,027. The incidence of taxation during the same year was Re. 1-8-3 per head of population. No large schemes of expenditure have been undertaken.

(iii) Bhakkar Municipality.

The Municipality at Bhakkar has existed since 1874. It consists of 11 members, of whom 3 are appointed *ex-officio* and the remainder nominated. The Sub-Divisional Officer of Bhakkar is *ex-officio* President of the Committee. The main source of income is octroi, which during 1913-14 provided Rs. 11,287 out of a total income of Rs. 20,365. The incidence of taxation per head of population during that year amounted to Rs. 2-1-6. No large schemes of expenditure have been undertaken. One of the members acts as Honorary Secretary to the Committee.

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Public Works.

Municipal Committees—(iv) Isa Khel Municipality.

The Isa Khel Municipality was originally created in 1875. It consists of 17 members, of whom 5 are *ex-officio* appointed and the remainder are nominated. During 1913-14 16 meetings were held, and the average attendance of all members was 61 per cent. Most of the income is derived from octroi. During 1913-14 the total incidence of taxation amounted to Re. 1-1-3 per head of population. For many years the absence of a good water-supply for the town has been a crying need, and recently steps have been taken to raise funds, with the help of contributions, to provide for this necessity. So far, however, although ample funds have been obtained, the scheme has not matured owing to the difficulty of discovering a suitable source of supply in the neighbourhood. The attempt to overcome this difficulty is still engaging attention.

Notified areas.

There are no notified areas in the district.

Section F.—Public Works.

Public Works.

The Mianwali sub-division (Buildings and Roads Branch) is attached to the Shahpur Division of the 1st (Rawalpindi) Circle. The principal Government buildings are in charge of the Public Works Department, but the roads are now in charge of the District Board.

Nammal Dam and Canal.

The only important work constructed in the district by the Department during recent years is the Nammal Dam and Canal. This canal was opened on 2nd December 1913 by His Honour the Lieutenant-Governor Sir Michael O'Dwyer. An interesting description of the dam and canal was contained in a speech made by Colonel R. S. Maclagan, C.B., C.S.I., at the opening ceremony and is reproduced below:—

The dam closes up a narrow gorge of limestone rock, thus forming a large lake above it, the water level of which, with the normal rainfall, will, it is calculated, stand at R. L. 1,160, *i.e.*, 20 feet below the crest of the weir, and will contain 630 million cubic feet of water. This will suffice to supply a small canal with an average discharge of 42 cusecs for the rabi. The crest of the dam is built at R. L. 1,180, which is 20 feet above the normal water level, and at the two sides are waste weirs, which are calculated to carry off the highest probable floods. The main supply of water in the reservoir is obtained from streams on the northern slopes of the Salt Range, which, with their numerous tributaries, drain an area of 125 square miles of steep hill side and 67 square miles of more or less open and flat country, thus giving a total catchment area of 192 square miles.

The dam is designed of what is known as the gravity section, that being considered the most suitable for the site. The total cost of its construc-

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Police and Jails.
Nammal Dam and Canal.

tion is Rs. 3,27,000 excluding Rs. 44,845 compensation for land, which will, when the lake is full, be submerged. The following figures may be of interest :—length of dam, 330 feet ; height above head of gorge, 105 feet ; breadth at base, 72½ feet ; breadth at crest, 8 feet ; storage capacity with normal rainfall, 630 million cubic feet ; maximum capacity, 2,100 million cubic feet.

The canal takes off from the nullah about two miles below the dam. The head-works are of a simple nature, consisting of a low weir across the gorge, which will divert all flow to the canal head. The area of the waterless tract commanded by the canal is over 125 square miles, but the canal is at present calculated to irrigate only 26 square miles. The total length of the canal is 16 miles, the bed width is 6 feet at the head, tailing to 2½ feet at Mianwali. Its cost is Rs. 1,07,000. Though small, it is of great benefit to the inhabitants of the vicinity, for the canal irrigates one of the dreariest wastes in the Punjab, where buffaloes, camels and windmills struggle jointly but ineffectually to raise a trickle from wells eighty feet deep.

Section G.—Army.

Army.

There is no cantonment in the district. The whole district, except that portion which lies west of the River Indus, is included in the Jhelum Army Brigade, which forms part of the 2nd (Rawalpindi) Division.

Indian army recruits.

Military service is popular among certain sections of the population, the inhabitants of Bhangi Khel being particularly fond of it, and practically every household in this tract contains at least one representative in the army. In the Bhakkar Tahsil the Biluches, especially in the neighbourhood of Kotla Jam, and the Bhidwal Jats of Bhidwalanwala in the Thal are well known for their readiness to enlist.

Section H.—Police and Jails.

Strength of Police force.

The police force is controlled by a District Superintendent assisted by a Deputy Superintendent. The strength of the force is given below (1913) :—

Inspectors	4
Sub-Inspectors	21
Head Constables	58
Ferry Constables	8
Mounted Constables	6
Foot Constables	396
Total ...	493

CHAP. III-H.

Police and Jails.

In addition, there are 11 town watchmen and 434 village watchmen in the district, appointed for the purpose of dealing with crime.

Strength of Police Force.

The police stations, or *thanas*, and out-posts are distributed as follows :—

Tahsil Mianwali —Four police stations, at Mianwali, Mochh, Chakrala, and Piplan, and one out-post at Dhak.

Tahsil Isa Khel— Three police posts at Kalabagh, Isa Khel, and Kamar Mashani, one out-post in the Bhangi Khel tract.

Tahsil Bhakkar—Four police posts at Maibal, Bhakkar, Jandanwala and Mankera, two out-posts at Darya Khan and Haidarabad.

There is a cattle-pound at each police station as well as at several of the other larger villages.

Recruitment and training.

The majority of men enlisted are residents of this and the neighbouring districts, the two northern tahsils providing by far the largest number. The Bhangi Khel tract, however, does not furnish many recruits for the police, as it does for the Army. Recruits from the Mianwali and Mochh tracts of the Kachchi are as a rule not found to be very satisfactory owing to their disinclination to serve at a distance from their homes, and their propensity to resign during harvesting operations. Recruits are trained at head-quarters by experienced drill instructors, and they receive a grounding in the main principles of police work. Selected men who possess educational qualifications are also sent twice annually to the Police Training School at Phillaur.

Trackers are enlisted locally. The residents of the Thal acquire great sagacity in the work of tracking, and this aptitude provides a valuable aid in the detection of crime.

Finger prints.

There is a finger print bureau at the head-quarters of the district under an expert Head Constable. Constables trained in the methods of taking finger prints are also posted to most of the police stations.

Criminal tribes.

There is no notified criminal tribe in the district.

Crime.

Statistics relating to crime and the working of the police are given in tables 34 and 48 of part B.

CHAP. III-H. Police and Jails. Crime.

Crime in the two northern tahsils differs mainly from that in the Bhakkar Tahsil in that it is characterized by a much larger proportion of offences against the person and crimes of violence. The population of the northern half of the district is mainly composed of Pathans and Awans, and both these tribes are apt to regard human life as worthy of small consideration, where personal animosity or gain is concerned. The Jat and Biluch of the Bhakkar Tahsil, on the other hand, are on the whole neither vicious nor vindictive, the form of crime, in which they most commonly indulge, being cattle theft.

The great majority of offences against the person, including murders, are due to disputes over women, which, during recent years, have shown a tendency to increase, owing partly to a growing numerical disproportion between the sexes. Violence is also frequently the upshot of disputes concerning land or the rights in water. Compared with neighbouring districts, murders and crimes of violence are generally less rife, owing to the fact that the Frontier Crimes Regulation is in force in this district.

Cattle-lifting prevails throughout the Kachchi tract and the Thal. It is conducted in a very systematic way by thieves, who have confederates known as '*rassagirs*' or rope-holders, to whom they pass on the stolen cattle at a distance from the scene of the theft; these *rassagirs* frequently live outside the district and they in turn pass the cattle on to others. Thus, even if the owner has succeeded in following the tracks of the original thief, he generally finds that he is too late, so far as retrieving his cattle is concerned. It is a common practice for the thieves and their confederates to offer to return the stolen animal to the owner on payment of a ransom fee called '*bhunga*'. This offer is generally made through an intermediary. In a great many cases the owner, knowing that he will have this alternative, abstains from reporting his loss in the police station, or possibly only reports, after he has entered into *bhunga* negotiations, and finds that the thieves are trying to cheat him into paying *bhunga*, when they are unable to return his animal, having already passed it on too far along the *rassa* to retrieve it. In such cases they often try to palm off a substitute on the owner, which he knowing well to be property stolen from some one else, is naturally reluctant to receive. At this stage of affairs he reports the matter to the Magistrate or the Police in a hopelessly garbled form designed to conceal his own share in the *bhunga* negotiations, and it is then as a rule too late to secure such evidence as might prove the guilt of the offenders.

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Police and Jails.

Crime.

Cattle when grazing are allowed great freedom to roam, and large herds are often in charge of small boys, who exercise a very perfunctory watch over their charges. The facilities for cattle thieving are therefore ample, and although the tracker's skill does much towards enhancing the risk which the thieves run, yet the crime, which among a considerable section of the population is regarded rather as a pastime, is a source of emolument, which attracts many exponents. Burglaries are for the most part confined to the towns and larger villages, and among the Pathans are sometimes accompanied by violence and the use of dangerous weapons.

The most serious form of crime which occurs in the district consists of dakaities by armed bands, sometimes of transborder men, and sometimes of bad characters from Bannu or Kohat. Most of these occur in the Isa Khel Tahsil, which is within fairly easy striking distance for these bands, who are able to enter the tahsil secretly, raid a village or two looting the principal Hindu inhabitants, and make good their escape across the Maidani range, all within a space of a few hours. There have been a considerable number of these dakaities, and they are generally schemed by some outlaw, who has been a resident of the Isa Khel Tahsil, but has escaped from justice. Without the local knowledge furnished by such a guide, these bands could hardly carry their raids through with success. The steps taken to combat these marauders are for the most part carried out in the neighbouring districts of Bannu and Kohat, to which intimation of their raids is promptly sent by telegram, in the hope that the dakaits may be cut off and captured on their return journey through those districts. Villagers from the Isa Khel Tahsil also form parties, called *chiggas*, which follow up the tracks of the dakaits. Steps have been taken recently to increase the measures for the protection of the tahsil against these raids.

Track evidence.

Mention has been made above of the important part played by trackers in the detection of cattle thieves. Track evidence, indeed, is a conspicuous element in nearly all cases of every sort, which come before the courts in the Bhakkar Tahsil, though its value naturally differs very greatly under different circumstances. The people themselves are inclined to attach a very great importance to this form of evidence, of which many instances could be multiplied. For example, if a casual wayfarer in the Thal happens to find himself on what he suspects to be the trail of a cattle thief, he will in all probability follow up the trail, until he has caught the thief, not because he is conscious in so doing of any duty to society,

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but because he fears that other pursuers along the trail may find his tracks mingled with those of the thief and charge him as a confederate. Again, when there has been a fight, and some combatant has been left seriously hurt and unable to move from the spot, where his opponents have laid him out, not even his friends will go near to succour him, lest their tracks be found in the neighbourhood of the scene of the riot, and they be charged with having participated in the fight.

Jails.

The district has a single jail of the third class, situated at the head-quarters of the district, and one lock-up situated at Bhakkar.

The district jail is constructed to accommodate 293 prisoners. During 1913 the average total population was 228. There is a separate ward for female prisoners, and another for under-trial prisoners.

The health of the prisoners is generally good. The mortality *per mille* of average strength during the three years ending 1913 was as follows :—

1911	...	...	...	...	6·49
1912	...	...	...	...	*Nil.*
1913	...	...	...	...	*Nil.*

The ratio of admissions to hospital *per mille* of average population during the same years was :—

1911	...	...	...	...	364
1912	...	...	...	...	358
1913	...	...	...	...	516

The industries upon which the prisoners sentenced to hard labour are employed consist of oil-pressing and pounding *munj*. Prison labour is also utilized in pumping water from the well and other services connected with the jail management, including the upkeep of the jail garden. The products of the factories are disposed of to district officers and private individuals. The cash profits of the jail's manufactory operations for the three years ending 1913 are given below :—

					Rs.
1911	...	...	...	...	1,863
1912	...	...	...	...	1,219
1913	...	...	...	...	1,341

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Education and Literacy.

Jails.

The expenditure incurred in guarding and maintaining the prisoners in the jail during the same years, and the average cost per head is as follows :—

—	Expenditure.	Average cost per head.
	Rs.	Rs. A. P.
1911	20,802	104 2 1
1912	21,832	116 7 2
1913	24,031	105 6 4

The jail is in charge of a Superintendent, who is also the Civil Surgeon of the district; under him the staff consists of a Jailor, two Assistant jailors, and forty Warders. There is also a Matron in charge of the female ward.

The lock up at Bhakkar is used for the custody of persons under trial in the courts of magistrates sitting at Bhakkar. The average daily number accommodated during 1913 was nine males and one female, the annual cost per head of average population being Rs. 264-1-7. The maximum accommodation is for 20 males and 9 females.

Reformatories.

There is no reformatory in the district.

Section I.—Education and Literacy.

Literacy.

Table 50 gives statistics of literacy by religions and by tahsils. The percentage of literates to total population in 1911 was 3·3 for the whole district. In the case of Muhammadans the percentage was 0·1 only. The total number of literate persons was 11,203, of whom 2,691 only were Muhammadans. The number is smaller than in any district in the Province, except Simla, and the state of education in the district, especially among the Muhammadans, is backward.

Scripts.

The Persian character is employed in courts and offices, and by the small percentage of Muhammadans, who are literate, both for writing Urdu, and for reducing to writing poetry in the local dialect. The script employed by literate Hindus for writing account books, letters, etc., is the Kirrakki, which is a corrupt form of Sanskrit character. This script

CHAP. III-I. — Education and Literacy. — Scripts,

consists of a collection of consonants without connecting vowels, a method which often renders several diverse interpretations of the same writing possible. There are slight variations in the shape of the characters, as written in different parts of the district, and an inhabitant of one village may find considerable difficulty in deciphering a letter written in a village at some distance, unless familiar with the variations in the forms of letters which that village affects.

Indigenous methods of education.

Muhammadan boys are commonly sent to a *mullan* at the mosque, where they learn the Arabic character and are taught the *Kuran*, of which a few lines are committed to memory daily. In some cases these boys are taught enough to enable them to write a letter in the Persian character, but usually the instruction is confined to the religious scope above mentioned. Hindus similarly send their boys to a teacher, known as *Padha*, who teaches them the Kirrakki character and simple arithmetic. These indigenous forms of education are being rapidly replaced by the more modern methods, for utilizing which facilities have been much increased by the opening of more numerous schools through the agency of the district board.

Educational system.

Except the Government O'Brien High School at the headquarters of the district and eleven unaided Primary Schools, all the schools of the district are either maintained or subsidized through the agency of the district board or one of the municipalities. These schools are divided into Secondary and Primary Schools. The Secondary Schools include an Anglo-Vernacular Middle School at Bhakkar and Vernacular Middle Schools at Isa Khel and Daud Khel. The Primary Schools numbered in 1913-14 106 schools for boys and 19 schools for girls. Of the former, 64 were Board Schools, 35 Aided and 7 Unaided Schools. The latter comprised 7 Board Schools, 8 Aided Schools and 4 Unaided Schools. An Industrial School was also formed at Kalabagh in December 1913, to teach tailoring and carpentry, industrial classes being added to the previously existing Primary School. The number of scholars in the Kalabagh Industrial classes is 92. Sons of artisans are admitted without payment of fees.

There is no permanent training institution in the district, but a training class was opened for nine months in January 1914 for the training of Junior Vernacular teachers for Lower Primary classes. The following table summarizes the number

of schools of various classes and the total number of scholars in each, during 1913-14 :—

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Education and Literacy.

Educational system.

Class of School.	Number of Schools.	Number of Scholars.
High Schools	1	320
A. V. Middle Schools ...	1	332
Vernacular Middle Schools ...	2	456
Boys' Primary Schools—		
Board	64	4,071
Aided	35	1,465
Unaided	7	251
Girls' Primary Schools—		
Board	7	317
Aided	8	294
Unaided	4	135
Special Schools	1	156

Statistics for previous years will be found in table 51 of part B.

Inspection of the schools is carried out by a District Inspector and an Assistant Inspector, and inspections are also made from time to time by Revenue Officers.

Female education.

Progress in the matter of female education is fair. A movement for the establishment of a Middle School for girls at Mianwali has recently been started.

The O'Brien High School, Mianwali.

The O'Brien High School at Mianwali was founded in August 1904 by Major A. J. O'Brien, C. I. E., then Deputy Commissioner of the district. Rupees 13,000 was collected for the purpose. The school was taken over by the Government in January 1905. In April 1912 its Primary Department was handed over to the Municipal Committee, Mianwali. The number of scholars in the Secondary Department shows a progressive increase due to the popularity of the school and the growing demand for education. Each class is divided into two sections except the Senior Special class, which was opened in 1914. The

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Education and Literacy.

number of scholars on the rolls at the beginning of 1915 was 332, comprising 115 Muhammadans, 208 Hindus and 9 Sikhs. Over 100 are reading in the higher classes, but the middle classes are overcrowded and admission to them is sometimes refused.

The O'Brien High School.

The Matriculation Examination results of the last eight years have established the reputation of the school throughout the province, as may be understood from the following figures in which these results are tabulated :—

Year.	Number of scholars sent up.	Number passed.	Scholarships secured.
1907	19	17	3
1908	27	15	2
1909	26	19	2
1910	39	29	1
1911	47	29	3
1912	55	37	4
1913	56	32	4
1914	49	36	4

Thus during this period of eight years the school sent up 318 scholars for the Matriculation Examination of the Punjab University, out of whom 214 came out successful. Twenty-three Government and Univeristy scholarships have also been secured by the students of this institution during these eight years. The most important feature of the results is that the school has always stood first in the division, and that the proportion of those passing in the 1st Division has always been high. In 1914 out of 36 successful candidates 18 passed in the 1st Division, and in this respect the school was pre-eminent in the whole Province. Its scholars have also occupied high positions on the Provincial Pass List of the Matriculation Examination, the third place on that list in 1912 and the second place in 1913 being secured by its students. Similarly in the High School scholarship competition the school has been carrying off nearly all the scholarships every year, and in 1914 all the six scholarships were awarded to

students of this school. The school is very fortunate in possessing extensive play-grounds, and its inmates are encouraged in a fondness for games, no less than for work. Hockey, football, cricket, and *kabadi* are the games most in vogue, the two former being first in popularity. The school always takes the lion's share of prizes at the District and Divisional Tournaments, and thus fulfils the ideal of its own motto "work and play." The building is very spacious and airy, and is situated in a healthy spot outside the town of Mianwali. It consists of one hall, 14 class rooms, one science room, one science laboratory, and a room for teaching drawing. The staff comprises 17 teachers, of whom almost all are trained and certificated. A boarding-house is attached to the school and accommodates about 70 boarders.

The O'Brien High School.

Except for one short interval, Munshi Ghulam Muhammad Khan, M.A., has been in charge of the school since its foundation, and it is no exaggeration to say that the splendid results of the school are the outcome of his unceasing efforts and careful direction.

The Anglo-Vernacular Middle School at Bhakkar.

The Anglo-Vernacular Middle School at Bhakkar was originally a Vernacular School only, English having been introduced into its curriculum in December 1906, the *zamindars* of the tahsil having contributed Rs. 3,727 for its conversion. The school is at present hampered by being housed in an antiquated building, which is not ample enough for its needs. A new boarding house has recently been built by the Bhakkar Municipal Committee, upon whose fund the finances of the school depend, and this has in some degree improved the facilities at the command of the school. The number of scholars is 332.

Total expenditure on education.

The total annual expenditure on public instruction distributed between the various sources is given at length in table 52 of part B.

In 1913-14 the total annual expenditure was Rs. 84,769, out of which Rs. 49,086 was provided from Provincial Revenues. Increases in the Government grants during recent years have been very largely utilized in improving the pay of teachers. The amount received in fees has been steadily increasing year by year, and in 1913-14 amounted to Rs. 16,576, as against Rs. 6,559 in 1905-06.

Press and publications.

There is no press in the district, and no publications deserving of notice.

Section J.—Medical.

Salient statistics of hospitals and dispensaries.

The district contains a Civil Hospital at Mianwali and five dispensaries at Bhakkar, Kalabagh, Isa Khel, Massan, and Kamar Mashani. Table 53 gives the daily average attendance for each year.

The following figures show the accommodation and number of patients, indoor and outdoor, treated in each during the years 1912, 1913 and 1914:—

Name of hospital or dispensary.	Number of beds.	Indoor patients.			Outdoor patients.		
		1912.	1913.	1914.	1912.	1913.	1914.
Civil Hospital, Mianwali	40	716	629	658	21,255	22,119	22,971
Isa Khel Dispensary ...	26	280	332	373	23,146	20,949	21,307
Kalabagh " ...	18	250	185	177	17,985	21,[illegible]81	21,532
Bhakkar " ...	10	544	548	466	15,050	15,225	15,074
Massan " ...	Out door only.				4,958	6,181	5,798
Kamar Mashani Dispensary.					7,635	10,067	12,134
Total ...	94	1,790	1,694	1,674	90,029	96,522	98,816

The following are the figures of surgical operations performed during the same years:—

Hospital or dispensary.	Surgical operations.		
	1912.	1913.	1914.
Civil Hospital, Mianwali ...	1,046	863	934
Isa Khel Dispensary ...	1,117	8[illegible]4	1,037
Kalabagh " ...	621	480	476
Bhakkar " ...	1,044	977	1,002
Massan " ...	132	173	189
Kamar Mashani Dispensary ...	305	292	459
Total ...	4,265	3,619	4,097

CHAP. III-J.

Medical.

Income from various sources and expenditure during the same three years are tabulated below:—

Salient statistics of hospitals and dispensaries.

Hospital or dispensary	INCOME.						EXPENDITURE.		
	From Local Funds.			From other sources.					
	1912.	1913.	1914.	1912.	1913.	1914.	1912.	1913.	1914.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Civil Hospital, Mianwali.	4,118	4,280	5,366	18	297	8	5,432	4,982	6,124
Isa Khel Dispensary	3,811	2,437	1,436	10	102	...	5,463	3,043	3,893
Kalabagh "	1,807	1,446	2,278	114	79	1	2,701	2,305	3,090
Bhakkar "	4,920	992	4,863	367	255	306	3,636	6,671	5,517
Massan "	...	...	...	1,002	1,009	1,003	917	1,031	1,396
Kamar Mashani, Dispensary.	...	...	...	1,108	1,060	1,003	1,076	1,226	1,311
Total ...	14,656	9,155	13,943	2,619	2,802	2,321	19,225	19,258	21,331

Special institutions.

There is no Lunatic Asylum nor Leper Asylum in the district. The District Jail, however, contains a leper ward for the accommodation of leper convicts.

Vaccination

Table 54 contains statistics of the number of persons vaccinated per annum. There has been a gradual progress since 1906-07 in the number of persons successfully vaccinated *per mille* of total population. Deaths from small-pox have never exceeded one *per mille* of total population since 1902, when the percentage was 1·16. In the municipal towns vaccination is arranged for by the municipal committee, and for rural areas vaccinators are appointed, who are paid by the District Board.

Village sanitation

The sanitary arrangement of municipal areas is undertaken by the municipal committees, which entertain the necessary staff. In villages there are no special conservancy arrangements, but the headmen are called upon to arrange that their villages are not kept in a condition dangerous to the public health and are encouraged in the performance of this duty by the grant of certificates and other awards. As a rule, however, the sanitary arrangements are imperfect.

CHAP. III-J.

Medical.

Sale of quinine in villages.

During the malarious season large quantities of quinine are distributed gratis through the agency of the Revenue officers and the zaildars and headmen. In recent years also, the district board has paid some attention to the general distribution of quinine. Quinine can also be purchased at many of the village post offices.

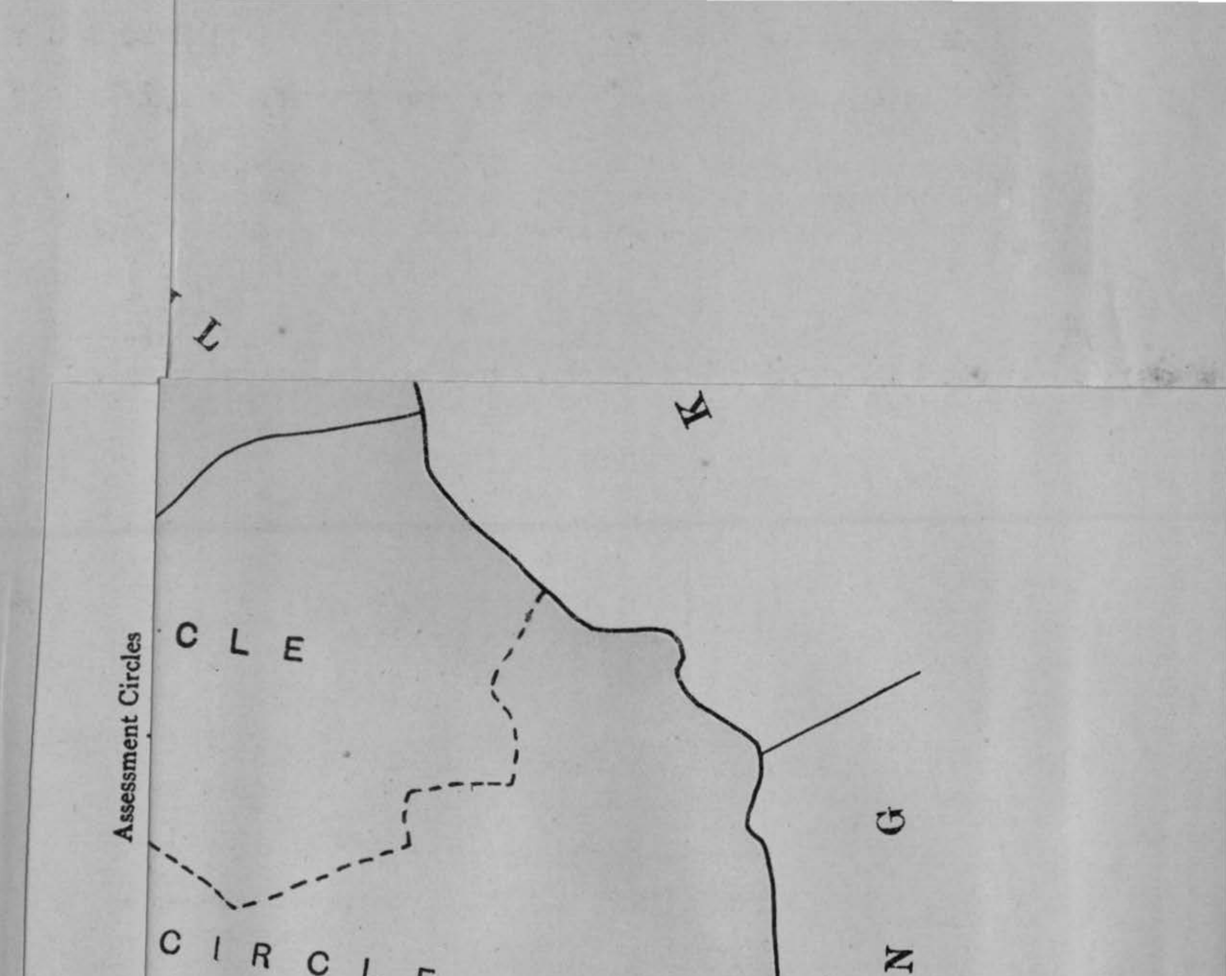


Photo.-Mec

Zinco, June, 1915.—No. 3177. 650

MIANWALI DISTRICT.

MAP No. 1.

Scale—8 Mile = 1 Inch.



Photo.-Mechl. and Litho. Dept., Thomason College, Roorkee.

Zinco, June, 1915.—No. 3177, 650

MIANWALI DISTRICT.
MAP No. 2.
Scale—8 Mile = 1 Inch.

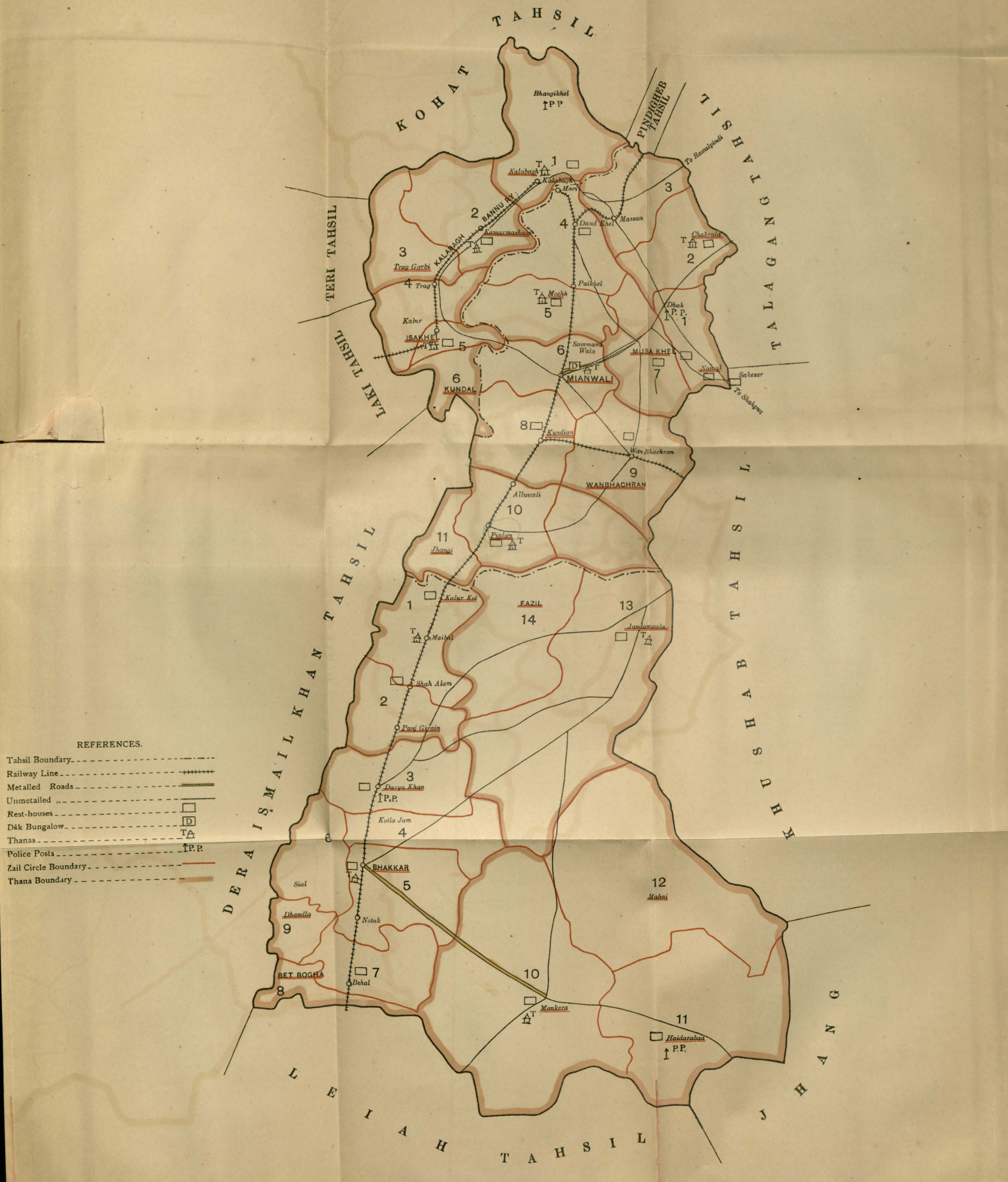


Photo.-Mechl. and Litho. Dept., Thomason College, Roorkee.

Zinco, June, 1915.—No. 577-I.

MIANWALI DISTRICT.
MAP No. 3.

Scale—8 Mile = 1 Inch.



Photo.-Mechl. and Litho Dept., Thomason College, Roorkee.

Zinco., June, 1915.—No. 3177-2,650